

THE FEASIBILITY OF MARKETING A NEW CONCEPT  
IN PROPERTY/CASUALTY SOFTWARE

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Many of INPUT's professional staff members have nearly 20 years experience in their areas of specialization. Most have held senior management positions in operations, marketing, or planning. This expertise enables INPUT to supply practical solutions to complex business problems.

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O'Flaherty, Tom

The Feasibility of Marketing a New  
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7

THE FEASIBILITY OF MARKETING A  
NEW CONCEPT IN PROPERTY/CASUALTY  
SOFTWARE

Prepared For:  
INSCO SYSTEMS

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AUGUST 1981



# THE FEASIBILITY OF MARKETING A NEW CONCEPT IN PROPERTY/CASUALTY SOFTWARE

## ABSTRACT

This study evaluated the feasibility of a new insurance software concept that had been suggested in an earlier study. Fifty insurance companies were interviewed and the proposed software was reviewed with them. Respondents were quite enthusiastic and made suggestions for further improvements. The new concept was preferred by a wide margin to both other vendor software and in-house software.



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# THE FEASIBILITY OF MARKETING A NEW CONCEPT IN PROPERTY/CASUALTY SOFTWARE

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## I MANAGEMENT SUMMARY



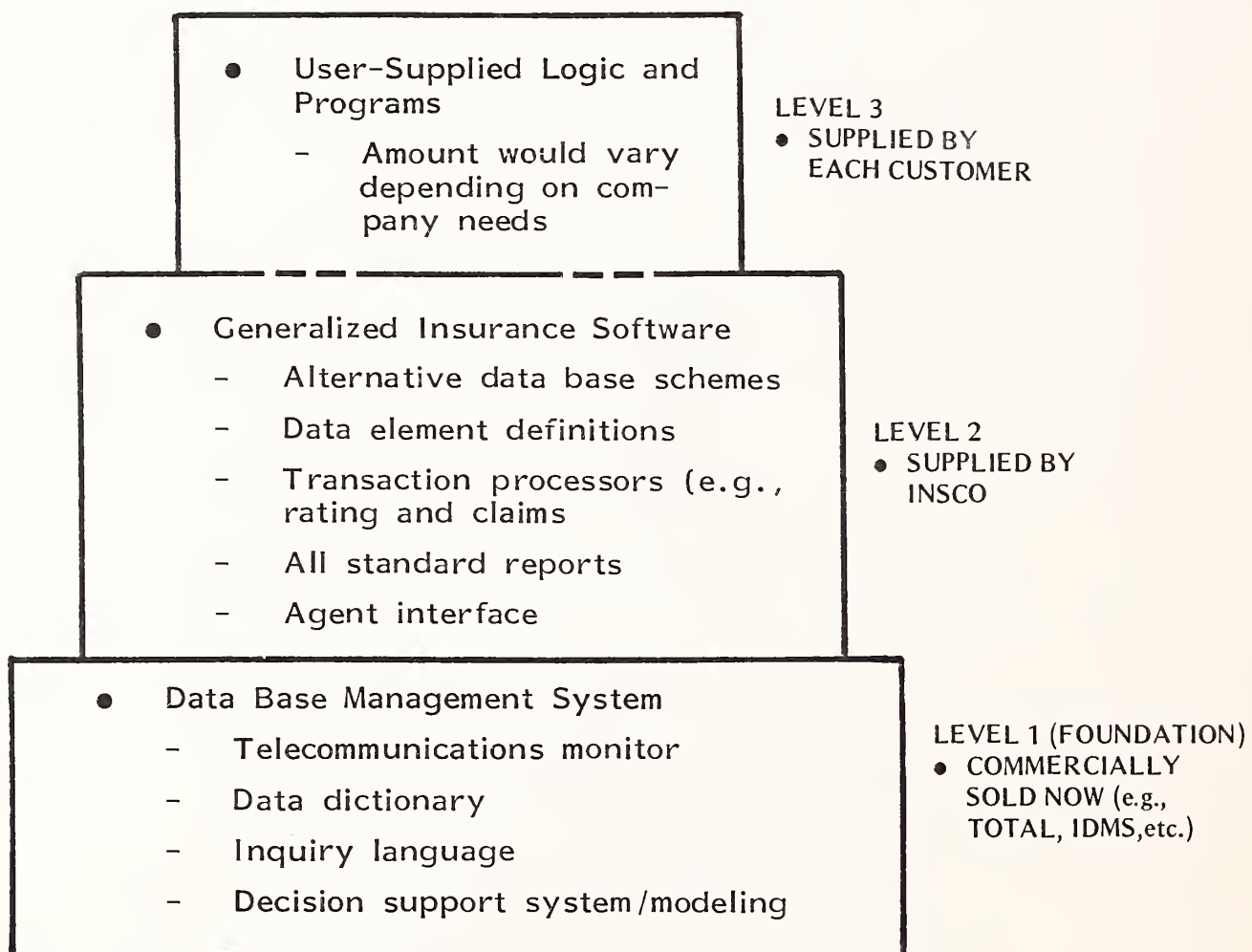


## I MANAGEMENT SUMMARY

- The purpose of this study is to evaluate the feasibility of a new insurance software concept suggested at the conclusion of an earlier study by INPUT in March of this year.
- The product concept, shown pictorially in Exhibit I-1, would supply a purposely incomplete software package that each insurance company customer could modify to the extent required to fit its needs.
  - Much of the key software (Level 1) would be bought "off-the-shelf."
  - INSCO would develop the key Level 2 insurance-oriented software.
- The evaluation in this report covers the following issues:
  - Will the product be accepted by customers?
  - Is product development feasible?
  - Would the new product be competitive with the market leader, PMS?
  - What are the positive and negative effects of INSCO's link to Continental Insurance?

## EXHIBIT I-1

### NEW SOFTWARE CONCEPT





## A. CUSTOMER ACCEPTANCE

- The product concept was presented to 50 insurance companies of differing types and sizes.
  - The response to the concept was quite positive, as shown in Exhibit I-2.
  - More importantly, the new concept was seen as superior to both in-house software and other vendor packages, as shown in Exhibit I-3.
  - . Current PMS/ISA clients were just as positive as the total sample.

## B. PRODUCT DEVELOPMENT

- The new product should offer support for all insurance lines and functions.
- To produce a better product faster, as well as to assist in subsequent marketing, INPUT recommends that the vendors of the Level 1 software, shown in Exhibit I-4, be closely tied to INSCO as "co-venturers."
  - There would be no legal or financial ties as in a joint venture.
  - The products would be integrated from a functional and support standpoint and marketing would be coordinated.
- There are many advantages to having much of the insurance software (Level 2) developed by software contractors under close INSCO supervision.
  - Software consultants have wide experience and are used to working under serious time constraints.

## EXHIBIT 1-2

### COMPANY ATTITUDE TOWARD NEW INSCO SOFTWARE CONCEPT

TYPE OF COMMENT	PERCENT OF RESPONDENTS
All positive	46%
All negative	14
Mixed	34
No response	6
<ul style="list-style-type: none"><li>● Typical positive response: "Sounds good."</li><li>● Typical negative responses: "Too big for our company," "We prefer in-house software."</li></ul>	

# EXHIBIT I-3

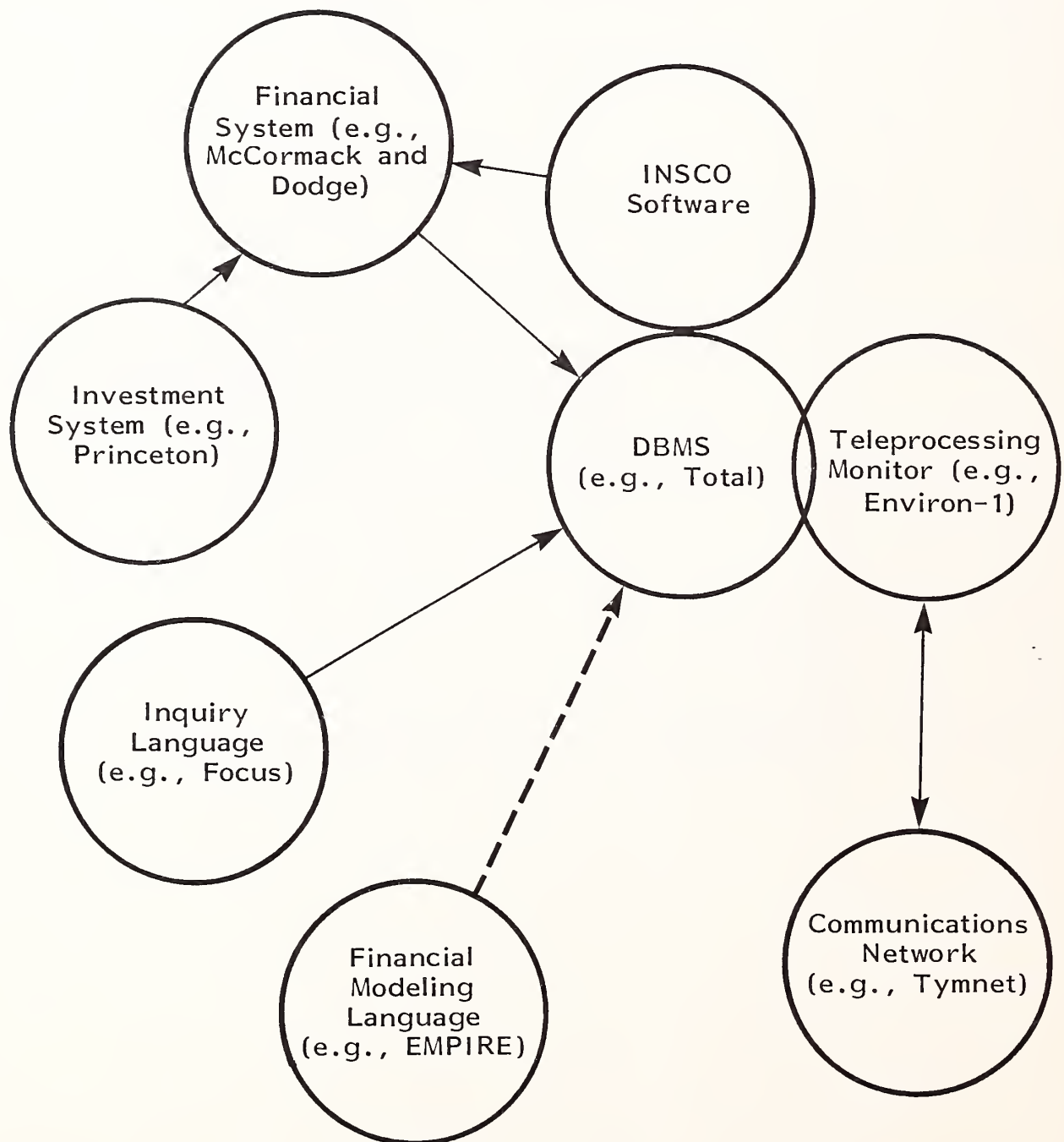
## COMPANY PREFERENCES FOR NEW INSCO SOFTWARE CONCEPT, IN-HOUSE, AND VENDOR SOFTWARE

INSCO CONCEPT VERSUS	PERCENT OF RESPONDENTS BELIEVING		
	INSCO BETTER	INSCO WORSE	NO OPINION
In-house software	66%	30%	4%
Vendor software	88	2	10
PMS/ISA clients (19 interviews)	90	5	5



# EXHIBIT I-4

## CO-VENTURE PRODUCTS



### C. COMPETITIVE POSITION

- PMS is a formidable competitor with a very strong growth pattern, as shown in Exhibit I-5.
- However, PMS profitability has not been as high and has, moreover, been erratic.
  - This is caused by much higher than average development costs.
    - These costs are kept high by an overly broad product line and an arguable software design approach.
    - PMS is, in essence, itself supporting all three levels of software in Exhibit I-I using a monolithic software design.
  - There is an excellent likelihood that the current PMS "price umbrella" will still be in existence several years from now.
    - There will be significant profit opportunities for INSCO's more attractive product that also costs less to install and maintain.

### D. LINKS TO CONTINENTAL INSURANCE

- The right sort of linkage between the new software product and Continental Insurance could have beneficial effects for the new product.
  - Continental's insurance experience could be invaluable in making sure that the product meets insurance needs.

EXHIBIT I-5

PMS GROWTH, 1975-1981

REVENUES FROM NON-AFFILIATED COMPANIES						
	1975	1976	1977	1978	1979	1980
Revenue (\$ millions)	\$1.6	\$3.9	\$7.0	\$9.3	\$12.0*	\$16.5
Percent increase over prior year	-	144%	79%	33%	29%	38%
						1981 (BUDGETED)
						\$22.0*
						33%

\* ADD \$7 MILLION FOR REVENUES FROM PMS AFFILIATED COMPANIES



- A panel of other companies will be assembled to provide similar advice. However, realistically, only Continental would offer INSCO designers the entree needed on an in-depth, almost day-to-day basis.
- Continental (or at least a part of Continental's business) should also use the product.
  - This is important for credibility reasons and is customary in the insurance software business.
- Continental could also provide a new software product for use as an "interim strategy" in order to keep INSCO's name before the marketplace as an innovative force to be reckoned with, before the new product is introduced.
- Continental may also wish to take part in development in order to serve some of its own future systems needs.

#### E. RECOMMENDATIONS

- INPUT believes that there is a definite product opportunity for INSCO and recommends that development of the product proceed on a phased basis, as shown in Exhibit I-6.
- Development costs and time are the key elements which must be developed in Phase I and are dependent on:
  - The role of Continental Insurance.
  - The extent of co-venturer assistance.
  - The product design and implementation approach.
  - Whether software contractors are used.

## EXHIBIT I-6

### PHASED APPROACH

PHASES	
I	Business Plan Development
II	Product Specifications
III	Product And Organization Building
IV	Field Testing
V	Marketing

## II INTRODUCTION





## II INTRODUCTION

### A. BACKGROUND TO THIS STUDY

- In 1980, INSCO was exploring the possibility of marketing a minicomputer-based turnkey system.
  - INSCO had discussions with AID about taking the AID-developed system now on a Microdata Reality and putting it on a Honeywell Level 6.
  - In-house (i.e., INSCO) development was another possibility.
- INSCO assumed that the best market for a future turnkey system would be insurance companies with the following characteristics.
  - Small to medium sized; i.e., direct premiums between \$10 and \$100 million.
  - A significant amount of business in personal lines.
  - Companies in the northeast and midwest states (i.e., Washington, DC, on the south, and Chicago on the west).
- INSCO decided that before proceeding further, it wished to better assess the market potential for a turnkey system market.

- In addition, INSCO wished to have an outside appraisal of:
  - The general market for DP services in small- to medium-sized companies.
  - The kinds of services that should be marketed.
- In November 1980, INPUT was commissioned to conduct such a study.

## B. HIGHLIGHTS OF THE INITIAL INPUT STUDY

- In March 1981, INPUT presented the results of its research and analyses to INSCO. Highlights of this study follow.
- I. ATTITUDES TOWARD DIFFERENT SOURCES OF AUTOMATION
- Because of the importance to the study of attitudes toward turnkey systems, care was taken to ensure a uniform definition of turnkey systems.
    - The major functional distinctions between turnkey systems and vendor-supplied software are contrasted in Exhibit II-1.
    - A similar sheet to Exhibit II-1 was used in the interview process to resolve any definitional questions.
  - Generally speaking, respondents had favorable attitudes toward in-house hardware and software, as shown in Exhibit II-2.
  - No respondent had anything good to say about processing services.
    - There is a basic aversion to this kind of service by companies because of:

# EXHIBIT II-1

## FUNCTIONAL DIFFERENCES BETWEEN TURNKEY SYSTEMS AND VENDOR-SUPPLIED SOFTWARE

CHARACTERISTIC	VENDOR SOFTWARE	TURNKEY
Hardware supplied with software.	No	Yes
Hardware/software combination compatible.	Not necessarily (especially if using existing hardware)	Yes
Operating system compatible with applications software.	Not necessarily (may require ongoing customer effort)	Yes (both supplied)
Level of installation/conversion support by vendor.	Varies	High
Extent of technical knowledge and self-support required of customer.	Varies - often medium-high	Usually low
Level of "hand holding" by vendor.	Varies	High
Extent to which customers are allowed to modify software.	Medium-high	Low-medium
Extent of "user friendliness" in software.	Varies - often oriented to traditional data processing department	Varies, but usually end user oriented

# EXHIBIT II-2

## ATTITUDE TOWARD SOURCES OF AUTOMATION

TYPE OF SYSTEM	ATTITUDES (percent)		
	POSITIVE	NEGATIVE	NEUTRAL/ NONE
Manual systems	7%	50%	43%
In-house hardware	83	3	14
In-house developed software	70	10	20
Vendor processing service	0	47	53
Vendor (insurance) software	27	37	36
Turnkey systems	7	40	53

NOTE: 30 RESPONDENTS

- . Lack of control.
  - . Lack of flexibility.
  - . Slow and/or late processing.
- Feelings were mixed on vendor software for insurance applications.
- Interestingly enough, manual systems and turnkey systems had uniform profiles, with few positive and about 50% negative attitudes.
  - For manual systems, respondents with no opinion usually assumed that the systems were on their way out and did not deserve thinking about.
- Turnkey systems are, of course, in a totally different category and the interviews probed the reasons for respondents' attitudes.
  - An important reason is that most respondents have had very little knowledge or exposure to turnkey insurance systems.
  - Another factor that was rarely made explicit was the respondents' fear for their own in-house DP function. This did not appear to be a primary factor for most respondents, since their personal position would be secure in any event.
  - The more thoughtful and knowledgeable respondents had given some thought to turnkey systems and had an implicit image of the characteristics of a turnkey customer. INPUT has made these characteristics explicit based upon this study as well as on information gained in related studies (Exhibit II-3).
    - . The match between these characteristics and those of the typical insurance company is not at all close.



## EXHIBIT II-3

### PROFILE OF A TURNKEY CUSTOMER

- Customer characteristics.
  - Little data processing experience, unsophisticated.
  - No on-site data processing.
  - Potential for immediate turnkey impact.
  - Few unique customer needs, actual or perceived.
  - Little resistance to changing administrative systems to conform to system.
  - Customization by customer or easy to do by vendor.
- Success industry: Auto dealers.

- Respondents felt that turnkey systems would have many of the same flaws as vendor processing and vendor software.
  - Their unique needs could not be met by generalized software.
- Turnkey systems were perceived as being very simplistic.
  - Basic changes to logic would take a long time.
  - Companies could not set their own priorities for making changes.
  - Extra services would be difficult or expensive to obtain.
  - In general, their company would lose control over data processing.

## 2. COMPANIES' FUTURE AUTOMATION PLANS

- Companies were quite forthcoming with their future automation plans. INPUT made judgments on the likelihood of planned work starting within three years and classified certain companies as likely to make at least significant automation enhancements within three years.
- Out of 30 companies, 17 are planning significant enhancements and nine are planning entirely new systems, with relatively little variation by type or size of company.
- The most significant findings concerning the source of future software are that:
  - No turnkey systems are planned.
  - No new vendor processing is planned for future systems.

- One company is planning to continue using a vendor processing service.
- There is almost an even split between companies planning in-house development and those planning to use vendor software, as shown in Exhibit II-4.
- Twice as many companies planning entirely new systems intend to use vendor software, while this ratio is reversed for those planning significant enhancements, as shown in Exhibit II-5.
  - The number of companies planning to use vendor-supplied software is especially significant, since only half of them have a favorable attitude toward it.
- Much of the motivation for using vendor software is probably explained by the desire to expand current systems to do on-line interactive processing.
  - Few companies' current systems can be easily expanded to do interactive processing.
  - In INPUT's opinion most companies in this size range do not have the time, resources, or confidence to develop an on-line data base system.
  - Consequently, it is very reasonable that two-thirds of companies planning to use vendor software have important on-line system plans, even though less than one-third of those planning in-house development have such plans, as shown in Exhibit II-6.
- This also explains a large part of the apparent contradiction in why companies with an unfavorable opinion of vendor software use it anyway. While these companies might prefer in-house development, they cannot see how it is feasible.

## EXHIBIT II-4

## SOURCES OF SOFTWARE FOR COMPANIES' FUTURE SYSTEMS

COMPANY TYPE	NUMBER OF COMPANIES PLANNING:	
	IN-HOUSE DEVELOPMENT	VENDOR SOFTWARE
<u>Mutual</u>		
Under \$25 million	4	1
Over \$25 million	2	5
Total	6	6
<u>Stock</u>		
Under \$25 million	4	3
Over \$25 million	4	3
Total	8	6
Under \$25 million	8	4
Over \$25 million	6	8
Total Companies	14	12

# EXHIBIT II-5

## SOURCES OF SOFTWARE FOR FUTURE SYSTEMS

SOURCE OF SOFTWARE	NUMBER OF COMPANIES PLANNING:		TOTAL
	ENTIRELY NEW SYSTEMS	SIGNIFICANT ENHANCEMENTS	
In-house development	3	11	14
Vendor software	6	6*	12
Don't know	1	1	2

\* INCLUDES ONE COMPANY WHICH WILL CONTINUE TO USE REMOTE PROCESSING.



# EXHIBIT II-6

## ON-LINE OBJECTIVES MOTIVATE SOFTWARE SELECTION

SOURCE OF SOFTWARE FOR FUTURE SYSTEMS	NUMBER OF COMPANIES SELECTING	COMPANIES WITH IMPORTANT ON-LINE SYSTEMS PLANS	PERCENT
In-house development	14	4	29%
Vendor	12	8	67
Total	26	12	-

- Companies are not enthusiastic about using vendor-supplied software, but they see few options, especially if they want interactive systems.
  - PMS and ISA are the only real choices. The complexity and large-company orientation of these products leave the smaller companies feeling very uncomfortable.
  - Companies also see some loss of control and flexibility in using these bulky packages.

### 3. TURNKEY SYSTEM VENDORS

- Vendors now trying to sell turnkey systems have not been very successful to date.
  - PMS offers what it considers a turnkey option (where it takes full responsibility for installation, conversion, etc.).
    - One out of 16 sales in 1980 was a "turnkey" system.
  - Lycor sells only turnkey systems and has been offering a property/casualty product since 1974.
    - It has had "seven or eight" sales since then.
    - It has been "pushing harder" for the last two years and has sold "three or four" in that period.
  - AID has been attempting to sell a second turnkey system without success in New England for three years (according to the vice president at the Andover Group, its first and only customer).
- Since INSCO has been discussing the acquisition of the AID package, the opinion of the VP for accounting and data processing at Andover is important.

- He is new to Andover, comes from a highly automated midwest company, and appears quite knowledgeable and perceptive.
- The AID system was a joint venture with the Andover Group in the mid-1970s. It was supposed to cost \$50,000, but it finally cost \$225,000.
- Andover is very satisfied, but the system is limited.
  - . It performs rating and issuing only.
  - . It has no direct billing or accounting.
  - . The system was supposed to hold 100,000 policies, but holds only 65,000.
  - . There is no mainframe link.
- To date, all data from the AID system has to be fed back into its batch statistical system.
  - . While the AID system does what it is supposed to, it does not perform any vital function.
- The Andover group will be totally automated over the next few years, having selected PMS in early 1981.
  - . Andover will be analyzing whether it is worthwhile to invest more resources in expanding and enhancing the AID system to serve as a front end to PMS.
  - . It is possible that the AID system will be abandoned when PMS is installed.

- The strong implication for INSCO is that the AID system, even if enhanced, would not prove a strong barrier against PMS/ISA penetration.

#### 4. SOFTWARE AS TURNKEY COMPETITION

- PMS and ISA are the leading software companies.
  - They are currently the only feasible sources of software for small companies.
  - They are direct competitors already for INSCO in the under \$100 million market.
    - Almost 60% of PMS's software customers are under \$100 million.
- Consequently, even an effective turnkey system would not have a protected market niche among the small companies.

#### 5. TURNKEY RECOMMENDATIONS BY INPUT

- INPUT believed INSCO would not find a ready market for a turnkey product and, consequently, recommended against proceeding further to develop or acquire such a product.

#### 6. PROPOSED NEW SOFTWARE PRODUCT

- During the analysis, it became clear that no current mode of delivery fully met the needs of small companies.
- A product should have the following characteristics:
  - It should be a software product with technically advanced characteristics that would function on IBM hardware. It should have a:

- Data base management system.
  - Data communications capacity.
  - Report writer.
  - Generalized transaction processor.
- At the same time, the software should purposely be incomplete from an insurance applications standpoint.
  - This would eliminate the tailoring otherwise necessary.
  - It would respond to real and imagined uniqueness in companies.
  - The product would be nonthreatening and, if supplied with the right level of documentation, consulting and skeleton modules could be very supportive.
- There would be functional advantages to many of the small insurers.
  - Data management and communications software would be off the shelf.
    - Little development time would be needed.
    - No investment in dollars or personnel would be needed.
    - The software would be known and reliable.
    - It could be used for other customer functions.
  - IBM hardware/software is understood.



- There would be no (or marginal) hardware upgrades needed in many companies.
  - Cheap used equipment is available; the IBM 4300 series is another option.
- The customer would have control and knowledge.
  - Software could conform to customer rather than vice versa. This is a key marketing and functional advantage.
  - Intermediary conversion steps would be removed; customers would not have to understand details of a foreign application or translate from one coding structure to another.
  - There could be faster response to necessary changes.
  - Small companies could have "paraprogrammers."
- Customers could automate whichever lines they wished.
- The marketing approach would stress the unique, "friendly" characteristics:
  - An open-ended package allows for each company's uniqueness to be expressed.
  - A modern data base management system and facilities for on-line communications bring a company up to date.
    - Company and DP management can focus on applications software.
  - The company will have complete control, and does not have to feel dependent and naked.

- What is good for a \$1.5 billion company may be too much for a \$20 million company.
- The DP staff can keep its empire, if that is a priority.
- INSCO's total image could soon become equal to or superior to that of PMS/ISA among the smaller companies.
- Exhibit II-7 contrasts the "proposed INSCO software" to the modes of delivery now available.
  - Potentially, it could be a superior product.
- There are several possible disadvantages to the product proposal:
  - There would be a significant resource commitment by INSCO of dollars, people, and especially, time.
  - Even with the INSCO name, a systems house's established product, and additional market research to refine the product's features, there is no guarantee that the marketplace would actually accept a product which utilized a different approach.
  - Would the Continental Group wish to provide resources to build a desirable insurance software product that could provide additional competition to itself and reduce the perceived value of its proprietary software?

### C. THE ORIGIN OF THE CURRENT STUDY

- INSCO determined that the new software concept proposed in INPUT's March 1981 study could be a viable means of regaining market position.

# EXHIBIT II-7

## EXTENT TO WHICH DIFFERENT MODES OF DELIVERY MEET COMPANY NEEDS

NEED	MODE OF DELIVERY				
	REMOTE PROCESS- ING	ISA/PMS SOFTWARE	TURNKEY SYSTEMS	IN-HOUSE SOFTWARE	PROPOSED INSCO SOFTWARE
Hardware					
On-site	1	5	5	5	5
IBM option	1	5	3	5	5
Software					
Flexibility and control	2	3	2	4	5
On-line inter-active	4	4	4	2	5
Database and reporting	3	3	3	3	5
All lines offering	3*	3*	3	2	4
Non-threatening					
Functionally	2	3	2	3	5
To DP department	1	2	1	5	4

KEY: EXTENT TO WHICH DELIVERY MODES MEET NEEDS  
5 = HIGH, 3 = MEDIUM, 1 = LOW

\*INCREASING

- INPUT was requested to perform a study to determine the amount of market acceptance which the new software concept would have.
- INPUT conducted 50 interviews with property/casualty insurance companies in May and June 1981.
  - Twelve were conducted on-site, and the remainder by telephone.
  - Appendix A contains a list of the insurance companies interviewed.
  - Appendix B contains a copy of the survey instrument used.
  - Respondents interviewed ranged from Executive Vice President to Supervisor level, with most respondents having titles equivalent to Vice President or Director.
- In addition, new material on competitors (especially PMS) was collected and analyzed.
- INPUT also drew on its experience in a number of areas including:
  - Computer services company start-up and planning.
  - Software product design and development.
  - Computer services company organization and marketing.



### III SURVEY FINDINGS





### III SURVEY FINDINGS

#### A. CHARACTERISTICS OF COMPANIES INTERVIEWED

- Unlike the previous study, this study aimed to represent all sections of the country, except for the Far West, as shown in Exhibit III-1.
- Similarly, the size of companies interviewed was not restricted to those with \$100 million or less of direct premiums.
  - In this study, groups with \$500 million (in several cases, more) of direct premiums were interviewed, as shown in Exhibit III-2.
- Companies were also selected according to their group affiliation.
  - Besides the group/nongroup breakdown, companies within groups were further categorized as being at the "core" of the group or being a "non-core" company, as shown in Exhibit III-3.
- Finally, four "new" companies were interviewed; i.e., companies less than ten years old (this included reorganized shells or failing companies taken over by new management).

EXHIBIT III-1

SAMPLE CHARACTERISTICS: GEOGRAPHY

GEOGRAPHIC COVERAGE	NUMBER OF COMPANIES
Northeast	17
Midwest	15
Southeast	10
Texas	5
West	3
Total	50

# EXHIBIT III-2

## SAMPLE CHARACTERISTICS: PREMIUM VOLUME

GROUP SIZE (DIRECT PREMIUMS) (\$ millions)	NUMBER OF COMPANIES
Under \$24.9	14
25-74.9	10
75-149.9	13
150-500*	13
Total	50

\*INCLUDES FOUR GROUPS BETWEEN \$500 MILLION AND \$1 BILLION.

EXHIBIT III-3

SAMPLE CHARACTERISTICS:  
GROUP RELATIONSHIPS

GROUP TYPE	NUMBER OF COMPANIES
Unaffiliated	27
Group member	
"Core"	13
"Non-Core"	10

## B. CURRENT STATUS OF AUTOMATION

- Companies are increasingly turning to on-line systems, as shown in Exhibit III-4.
- Companies in all size categories are reasonably satisfied with their present state of automation, as shown in Exhibit III-5.
- It is very important to keep in mind that virtually all companies aspire, at the least, to have all functions and all lines automated, as shown in Exhibit III-6.
  - Large companies are somewhat further below average in automating all lines. This is mostly a reflection of their size.
    - It takes longer to deal with, say, 25 lines than five.
    - Many large companies are slower to react than small companies.
  - It should also be kept in mind that by no means will all respondents achieve their goals.
    - Some for external reasons and others because they just don't have the talents or resources.
  - But, in any event, the product implication is clear.
    - Software products must be very comprehensive in order to be competitive.
  - These nonmainstream companies should not be ignored.
    - However, any software product which INSCO will introduce will certainly live or die in the mainstream IBM marketplace.



EXHIBIT III-4

PERCENT OF RESPONDENTS  
USING ON-LINE SYSTEMS

COMPANY SIZE (\$ millions)*	PERCENT ON-LINE**
Under \$24.9	92%
25-74.9	70
75-149.9	77
150-500	69
ALL COMPANIES	78%

\*SIZED BY GROUP

\*\*MOST COMPANIES STILL ALSO HAVE BATCH/RJE SYSTEMS

# EXHIBIT III-5

## AMOUNT OF SATISFACTION WITH AUTOMATION

COMPANY SIZE* (\$ millions)	SATISFACTION**
Under \$24.9	3.5
25-74.9	3.6
75-149.9	3.8
150-500	3.5
Total	3.6

\* SIZED BY GROUP.

\*\* 1 = LOW, 3 = MEDIUM, 5 = HIGH

# EXHIBIT III-6

## PROPORTION OF COMPANIES EXPECTING COMPLETE AUTOMATION IN LINES AND FUNCTIONS BY 1983

COMPANY SIZE* (\$ millions)	LINES	FUNCTIONS
Under \$24.9	86%	86%
25-74.9	80	90
75-149.9	92	92
150-500	67	83
Total	82%	88%

\* SIZED BY GROUP

- The previous study showed the hold which IBM had on even price-sensitive small companies.
- Exhibit III-7 shows the hardware used in over 500 property/casualty companies.
  - As expected, IBM has the lion's share.
  - It should be noted that all this IBM equipment, except for the System 3 family, is broadly compatible from a systems software standpoint (i.e., would all support the same commercial data base management system with only marginal differences).
    - This means that over half the insurance companies could be served by basically the same software product.
    - Over half the remainder are using quite small systems; i.e., are small companies with limited resources.
- Exhibit III-8, which shows the type of hardware used by the respondents, carries the same basic message as Exhibit III-7.
  - Little change occurs between vendors, which is quite reasonable, given the trauma involved in changing mainframe vendors.
  - Interestingly enough, the number of 4000 users is expected to double, attesting that line's attractive price performance.
- A somewhat surprising finding in this survey was the number of companies already using vendor software, as shown in Exhibit III-9.
  - To a degree, the exhibit overstates the actual percentage, since it includes companies who:
    - Plan to use PMS/ISA (but who may ultimately not).

# EXHIBIT III-7

## PROPERTY/CASUALTY COMPANY HARDWARE IN USE IN 558 INSTALLATIONS

● COMPANY - MACHINE TYPE	PERCENT
● IBM	
- Large (370/165 and Larger)	9%
- Medium-Large (370/158 - 3031)	16
- Medium (370/155 - 4341)	5
- Medium-Small (4331 - 370/148)	20
- Small (370/135 And Smaller)	9
- System 3	17
Total IBM	76%
● Honeywell	7
● Burroughs	5
● Univac	4
● DEC/DG/HP	4
● Other	4

SOURCE: COMPUTER INTELLIGENCE CORPORATION

# EXHIBIT III-8

## TYPE OF HARDWARE USED BY SAMPLE GROUP, NOW AND 1983

● COMPANY - MACHINE TYPE	NUMBER OF INSTALLATIONS	
	NOW	1983
● IBM		
- 3000 Series	7	6
- 4000 Series	6	12
- 370 Series	5	2
- Other	10	8
Total IBM	28	28
● Burroughs	6	7
● Honeywell	4	4
● Other	7	7
● None	5	4
Total	50	50

EXHIBIT III-9

SOURCE OF CURRENT AUTOMATION

COMPANY SIZE* (\$ millions)	SOURCE OF SOFTWARE** (percent of respondents)				
	IN-HOUSE	PMS/ISA	OTHER VENDOR SOFTWARE	SERVICE BUREAU	AFFILIATED COMPANY
Under \$24.9	87%	7%	-	13%	0%
25-74.9	90	20	20%	10	10
75-149.9	80	70	-	13	13
150-500	70	54	10	10	10
Average All Sizes	82%	38%	6%	12%	8%

\* SIZED BY GROUP.

\*\* TOTAL MORE THAN 100% BECAUSE OF MULTIPLE SOURCES OF AUTOMATION



- Those who use only a particular module (e.g., the ISA stock and bond package).
  - Are only using a single part of the PMS/ISA total package (apparently, over half of those interviewed).
- However, this relatively high percentage is quite important for evaluating vendor software in general (and against the new software concept in particular), since it means that much of the sample interviewed is quite knowledgeable concerning vendor-supplied software.
- An equally important finding is that a multiplicity of software sources is quite common.
  - This reflects the inadequacies and gaps of outside software, as well as the difficulty of converting all in-house software.
- Exhibit III-9 understates, if anything, the pervasiveness of in-house software. Exhibit III-10 shows that for most companies well over 90% of their software now in use was developed in-house.
  - Any software product should be sensitive to this fact (although PMS/ISA are not).
  - One of the goals of the new concept software should be to be as "friendly" as possible to this preexisting software.
- Respondents were asked an open-ended question on what they saw as the trends in insurance data processing in the coming years, as shown in Exhibit III-11. The responses underlined the information gathered on individual companies:
  - Over 60% saw significant activity in on-line systems/distributed data processing.

# EXHIBIT III-10

## ESTIMATED PERCENT OF SOFTWARE DEVELOPED IN-HOUSE

COMPANY SIZE* (\$ millions)	100%	90-100%	50-89%	1-49%	0%
Under \$24.9	64%	7%	14%	7%	7%
25-74.9	20	40	-	20	20
75-149.9	31	8	31	23	8
150-500	23	38	8	15	15
All Companies	36%	22%	14%	16%	12%

\* SIZED BY GROUP.

EXHIBIT III-11

TRENDS FORESEEN IN INSURANCE DATA PROCESSING

TREND	PERCENT OF COMPANIES*
More automation	22%
On-line systems	26
DDP/field office automation	36
Other	12
None	14

\* TOTALS MORE THAN 100% DUE TO MULTIPLE RESPONSES.

- Over a fifth saw "more" across the board.
- To a large extent, then, the new concept would be selling into both a buoyant market and one that is not served particularly well by present vendors (i.e., on-line systems).

### C. RESPONDENT OPINIONS TOWARD SOFTWARE ALTERNATIVES

- Before respondents were asked their opinion of the new software concept, they were queried about their "baseline" opinions toward the following:
  - In-house-developed software.
  - Vendor-supplied software.
- The questions were asked in two different ways:
  - First was an open-ended question to establish the respondents' general attitude and, more importantly, to find out which concerns came spontaneously to mind.
    - These spontaneous concerns were then categorized.
  - Next, in each area they were asked to rate software (high, medium, or low) following ten specific criteria, and overall.
- The most interesting finding concerning in-house software is how the ratings decline by company size across almost all categories in virtually a straight line, as shown in Exhibit III-12.
  - Small companies feel on closer terms to "their" software; this software is often relatively simple, in any event.

# EXHIBIT III-12

## RESPONDENTS' RATING OF IN-HOUSE SOFTWARE

CRITERIA	COMPANY SIZE* (\$ millions)				
	UNDER \$24.9	\$25-74.9	\$75-149.9	\$150-500	ALL COMPANIES
Speed of implementation	3.4	3.2	2.8	2.3	2.9
Ease of implementation	3.4	3.3	2.8	2.3	3.0
Ability to meet company requirements	4.4	4.3	4.0	3.8	4.1
Reliability	4.4	3.8	3.4	2.8	3.6
Conversion effort	3.1	3.8	3.0	2.3	3.1
Maintenance effort	3.4	3.6	3.0	2.4	3.1
Ability to make change easily	4.1	4.1	3.6	3.1	3.7
Speed of changes	4.1	3.6	3.6	3.3	3.7
Support effort	4.0	3.5	3.2	2.4	3.3
Cost	3.7	3.3	3.0	2.5	3.1
Overall rating	3.8	3.6	3.2	2.7	3.4

\* SIZED BY GROUP

RATING: 1 = LOW, 3 = MEDIUM, 5 = HIGH

- Large companies, on the other hand, will often have accumulated a formidable collection of software over the years, which is viewed as an increasing burden.
- . This accounts for the especially low ratings in conversion, maintenance support, and cost.
- Exhibit III-13, which rates vendor software, is a partial mirror of Exhibit III-12. In a number of key categories, the ratings of vendor software go up as company size increases, particularly:
  - Speed and ease of implementation.
  - Meeting company requirements.
  - Maintenance.
  - Cost.
- It is significant, though, that in other areas there is no appreciable difference between companies of different sizes.
  - Where there are differences, they are the kind that flow from company size.
    - . Large companies have the financial resources to make the initial investment of time and personnel more easily. (While PMS, for example, charges on a percentage of premium basis, there is a sizable initial installation fee that will, unavoidably, differ less by company size.)
    - . At least some of the senior MIS management is sophisticated enough to recognize the advantages of not reinventing the wheel.

## EXHIBIT III-13

## RESPONDENT'S RATING OF VENDOR SOFTWARE

CRITERIA	COMPANY SIZE* (\$ millions)				
	UNDER \$24.9	\$25-74.9	\$75-149.9	\$150-500	ALL COMPANIES
Speed of implementation	3.1	2.8	3.3	4.1	3.3
Ease of implementation	3.0	3.2	3.2	3.8	3.3
Ability to meet company requirements	2.5	2.4	2.7	3.4	2.8
Reliability	3.3	3.3	3.1	3.3	3.3
Conversion effort	2.9	2.8	2.9	3.1	2.9
Maintenance effort	3.2	2.7	3.1	3.6	2.5
Ability to make change easily	3.1	2.3	2.9	3.0	2.8
Speed of changes	3.1	2.1	2.9	3.0	3.1
Support effort	2.9	2.7	3.1	3.4	3.0
Cost	2.5	2.4	3.1	3.9	3.0
Overall rating	3.0	2.7	3.0	3.5	3.0

\* SIZED BY GROUP SIZE

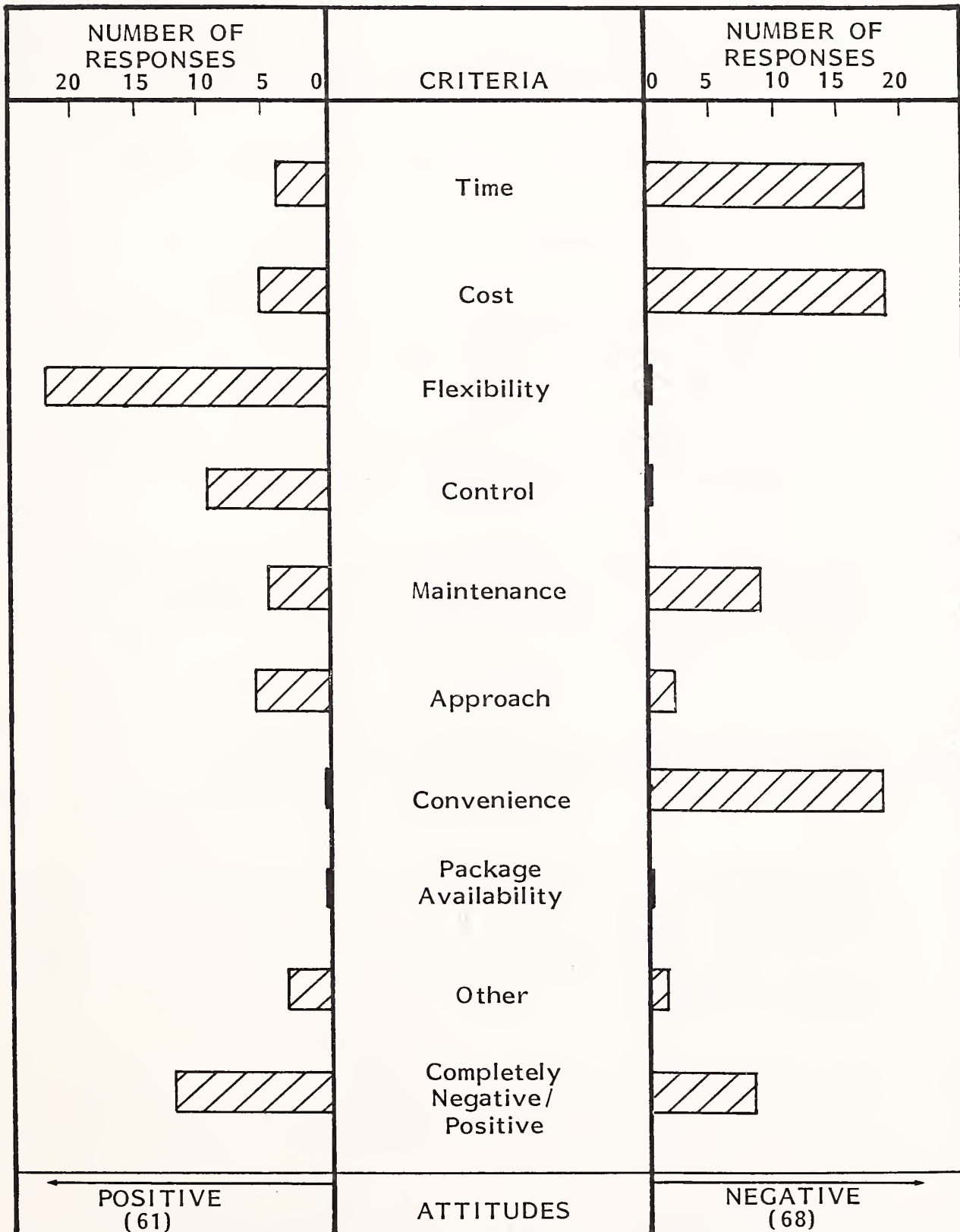
RATING: 1 = LOW, 3 = MEDIUM, 5 = HIGH



- Psychologically, they appear to be more self-confident and able to see themselves as beginning to "take on" a PMS.
- Equally important is the contrast between Exhibits III-12 and III-13.
  - Small companies tend to rate in-house software higher than vendor software, while the reverse is true for large companies.
  - However, the key exception is the ability of software to meet company requirements. Here, companies of all sizes rate in-house software higher.
    - This could provide the new software concept a definite edge, giving companies the best of both worlds.
  - Similarly, in the key areas of flexibility (ease and speed of making changes) large companies didn't see much difference between in-house and vendor software, while small companies gave in-house software a much higher rating.
- Many of these same points were made in response to the open-ended questions. The number of times a particular issue was raised by respondents is a good measure of its importance to them.
- For in-house software (Exhibit III-14), by far the most important positive attitude was toward its flexibility; the ability to control was also important.
  - Time, cost to implement, and general convenience were seen as the areas of weakness.
  - About the same number of respondents had completely negative or positive views toward in-house software.

# EXHIBIT III-14

## COMPANIES' ATTITUDE TOWARD IN-HOUSE SOFTWARE



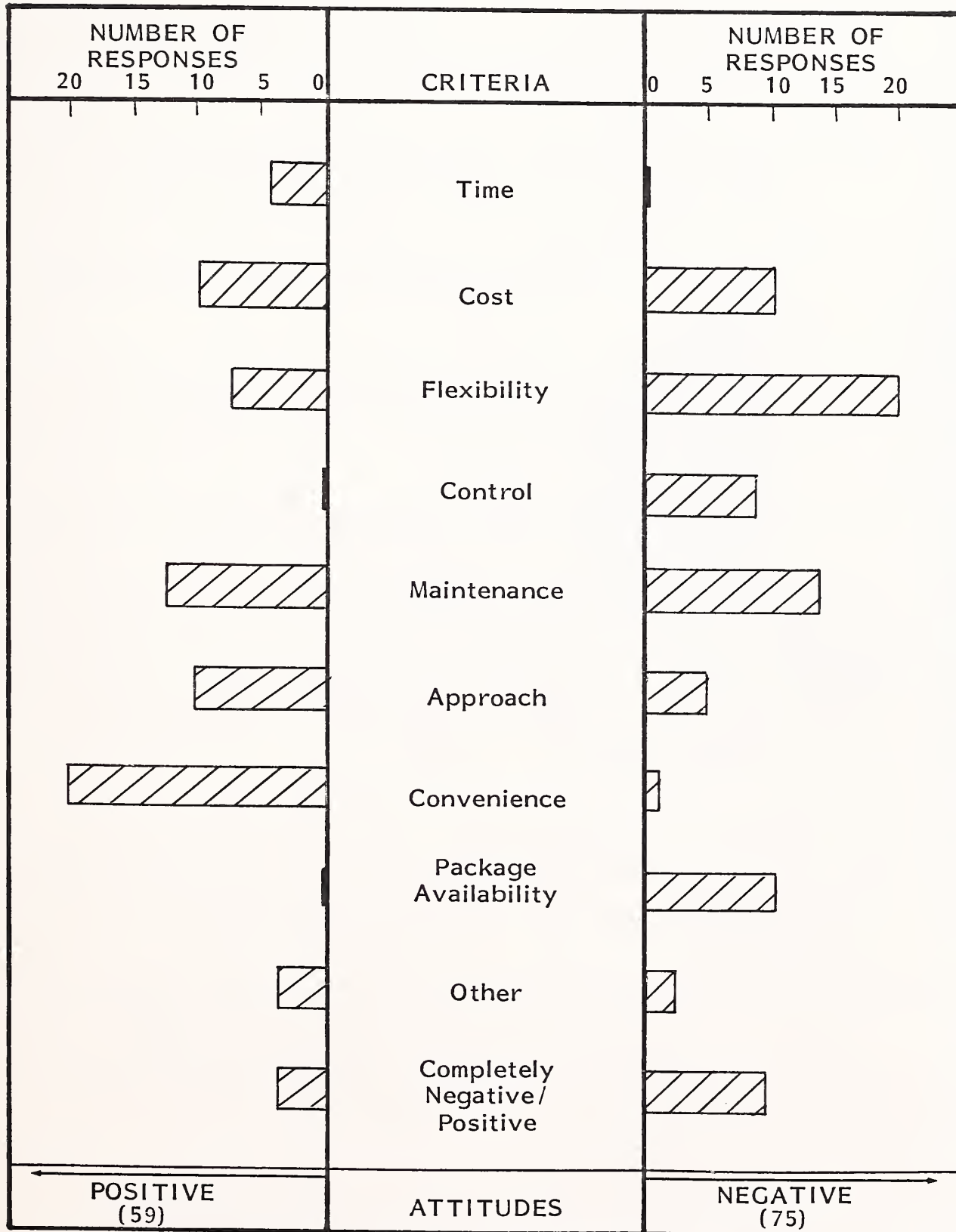
- (Note: Because of the small cell sizes, it was not meaningful to show these responses by company size.)
- Attitudes toward vendor software, as shown in Exhibit III-15, tend to be a mirror of those toward in-house software, with some important differences.
  - Convenience, control, and flexibility are virtually reversed.
  - Cost is split (largely along company size lines.)
  - An interesting complaint, confined to those with non-IBM hardware, is the lack of vendor software aimed at their machines.
  - Few respondents felt completely positive toward vendor software, while a significant minority had totally negative attitudes.
- These attitude questions underline the unfilled need for a software approach that combines the convenience of vendor software with the flexibility and control of in-house software.

#### D. ATTITUDES TOWARD THE NEW SOFTWARE CONCEPT

- The principal reason for this study was to determine the likely reception of the proposed software product. Since no product actually exists, the focus of the study was to determine attitudes toward the concept, making the concept as concrete as possible.
- The exploration of attitudes can be broken down into the following sections (numbers in parentheses refer to questions on the survey instrument in Appendix B):
  - The presentation and understanding of the concept itself (9a).

# EXHIBIT III-15

## COMPANIES' ATTITUDE TOWARD VENDOR SOFTWARE



- Respondents' immediate reaction to what they considered to be the good and bad points of the concept (9b).
  - Whether they considered the concept better or worse than in-house software and vendor-supplied software (9c).
  - Additional information respondents would need to judge the concept (9d).
  - The level of interest that respondents had in acquiring the software (9e).
  - The hardware and software environment they would like to see the new software compatible with (9f).
  - Whether they would prefer to purchase or lease the software (9g).
- One of the most important findings in the survey was the ease with which virtually all respondents understood the concept. There were some fears initially that being "surprised" with a new, somewhat complex idea would cause problems in comprehension, especially in the telephone interviews. This did not prove to be the case.
- This is of critical importance since, if the concept (if any) behind a product cannot be easily packaged and grasped, claims for uniqueness and superiority are much harder to maintain.
    - The distinguishing concepts (if any) behind PMS and ISA are, for example, very difficult to comprehend. Attempts at describing their product concepts seem to result in a maze of words or lines (see Exhibits II-16 and III-17).
  - The proposed concept was described in the on-site interviews by means of a diagram, similar to that shown in Exhibit III-18. Note: This is



## EXHIBIT III-16

### POLICY MANAGEMENT SYSTEMS SERIES II FAMILY OF SYSTEMS

These automated insurance processing systems offer flexibility, adaptability and business functions previously unavailable to the property and liability insurance industry. Individual system components are not radically different, but the manner in which they are organized and the range of capabilities provided establish a new plateau for insurance systems design.

Companies selecting PMS Series II systems are able to use video display terminals to complete a comprehensive range of insurance transactions efficiently without dependence on paper documents. PMS automated features relieve a company of many routine, clerical tasks such as policy rating and typing, and, most importantly, provide opportunities to improve professional productivity and management results.

Series I products were recognized for their use of a centralized data base and video display terminals. Series II systems further refine Series I concepts and add flexibility unavailable in the previous family of systems. Virtually every property and liability insurance company can benefit from at least some Series II capabilities.

Series II technology moves system design a major step forward by isolating variable business information from application programs. Instead of adding unique company data to individual programs or tables, this information is organized into central files and tables where programs access the data as needed during processing. Almost all of the information that makes one company different from another has been concentrated in specific components of PMS Series II systems. These components are relatively easy to modify, meaning that installation, customization and maintenance are greatly simplified. In many instances, modification of a few tables or files is all that is needed to adapt the system to an individual company or to a changing business condition. This concept has been applied to all Series II systems.

#### Policy Management System

The Policy Management System, the nucleus of the PMS Series II Family of Systems, has been completely redesigned for the new series of systems. Designated Release 5.3, this new system features a totally new system architecture, new functional capabilities and flexibility never before seen.

The design used for Release 5.3 can be accurately called state-of-the-art and will soon become the standard for software products design. PMS systems analysts anticipate using the Release 5.3 design as the base system throughout the early 1980's because the system readily lends itself to the constant changes typical of the property and liability insurance industry.

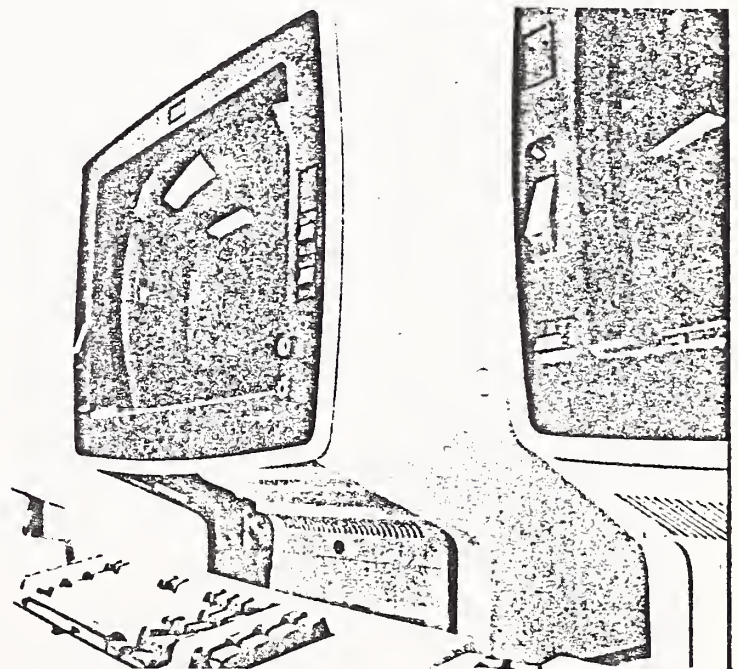
Major features of the new release include:

- New generalized terminal display screens for faster, more efficient training and easier use
- Simplified error correction procedures
- Automated rating for personal lines in all states and Canadian provinces

- Computer rating for workers' compensation and commercial automobile and a design that will easily accommodate the addition of future computer-rated commercial lines
- Entry Pending File for work-in-progress controls
- Midday, on-line deposit list printing for effective cash controls
- Automated printing of all policy declarations, both computer and manually-rated, eliminating policy typing.

#### Financial Management System

The PMS Financial Management System (FMS) is a comprehensive, automated, on-line accounting system designed for use by the property and liability insurance industry.



General ledger accounting was provided by the first release of the system, with extensive budgeting capabilities and interface with the Policy Management System added in the second release. Accounts receivables and accounts payables capabilities are planned enhancements.

Major features of FMS include:

- Information inquiry and entry through video display terminals
- Full general ledger accounting
- Complete budgeting capability
- Report requests generated from video terminals
- Numerous financial and accounting reports
- Automated income and expense distribution
- Automated check writing function
- Complete audit trail and security
- Interface with the Policy Management System

#### Securities Management System

The Securities Management Systems (SMS) is an automated system using video display terminals for securities management and control. A highly flexible.



EXHIBIT III-17

ISA PRODUCT CONCEPT

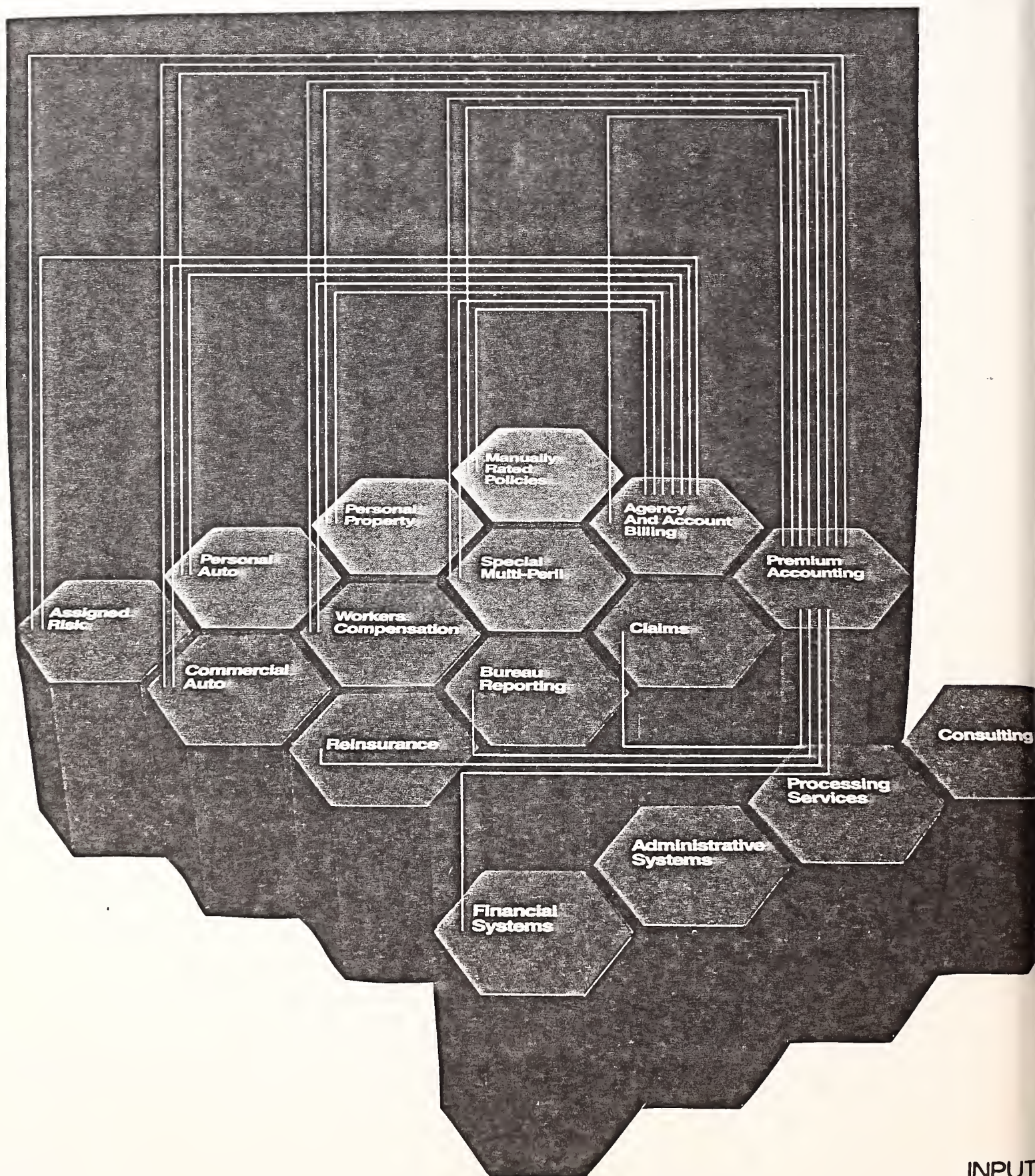
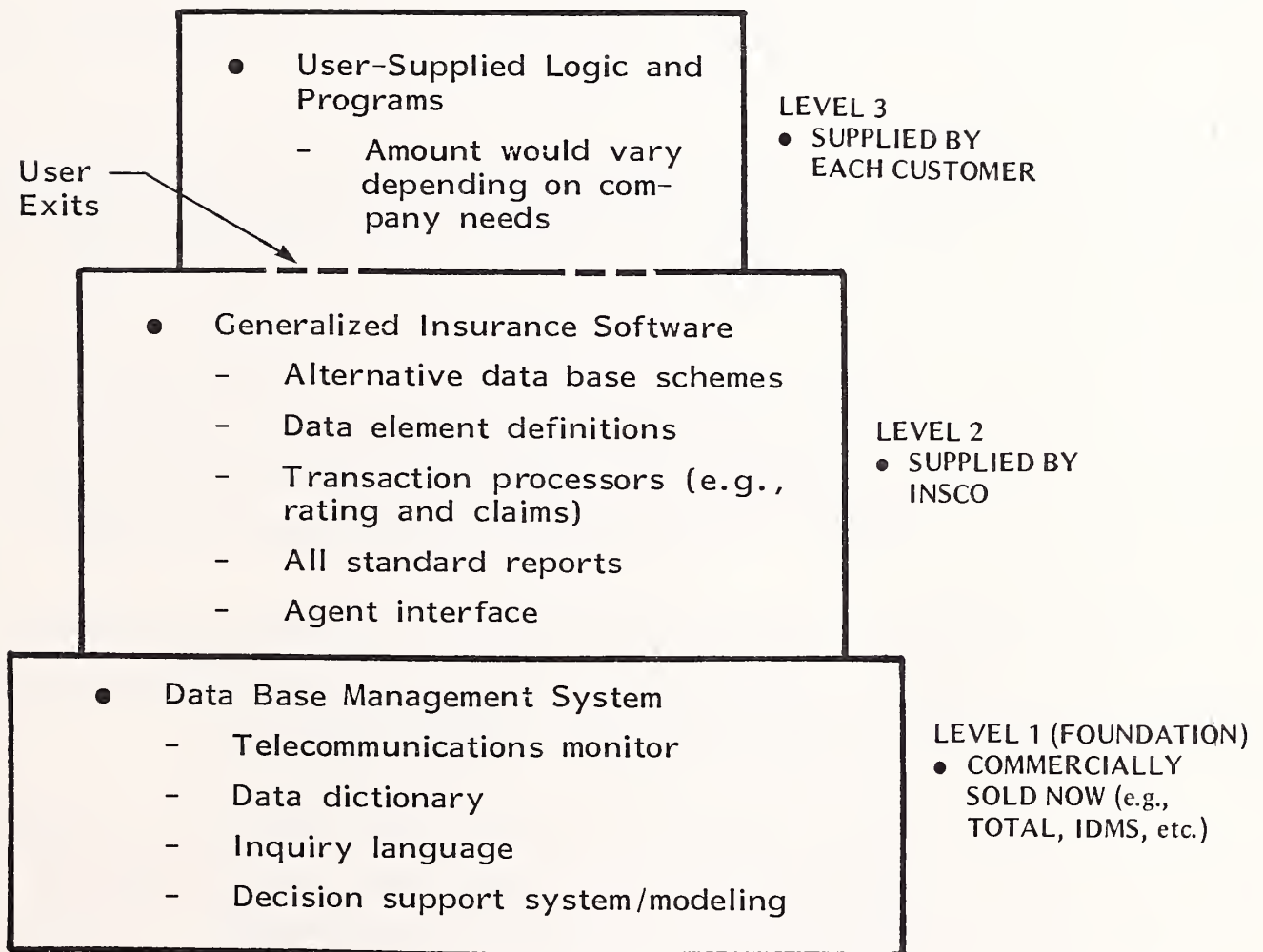




EXHIBIT III-18

NEW SOFTWARE CONCEPT



identical with the hand-drawn sketch used in interviews except that in the "level" descriptions "company" was used in place of "customer," and "vendor" for "INSCO."

- . Initially, this was done just to save time, since it didn't seem profitable to read the narrative description to someone across the desk.
- . However, the concept diagram proved to be an exceedingly strong statement of the product.
- . All respondents to whom it was shown took in the concept "at a glance" and immediately began discussing it in a very knowledgeable manner.
- One of the most important, and heartening, points about the concept is that it is "in the air." It does not represent a breakthrough, which could be dangerous from a market acceptance standpoint; is rather a logical step that is a relatively small way beyond current practice.
- . Several respondents noted that they were planning to do something like this themselves, but not in as elegant or well thought out manner as the proposed product.
- An early respondent talked quite persuasively about the need for "exits" between the second and third levels, so that changes to the INSCO software would not disturb the customers' code.
- . This addition was made to the diagram and noted with approval by several later respondents.

- . Almost all respondents made similar thoughtful comments or asked probing questions. Consequently, it can be stated with some certainty that respondents had focused (and correct) ideas about the nature of the proposed product.
- When asked their opinion of the product, fully 80% had positive comments. Generally, these comments endorsed the entire concept. Most positive comments were some variation of the following: "I like it, this is a good approach."
- Negative comments were expressed by 48% of the respondents. However, these rarely went to the heart of the concept and were, in fact, usually associated with general approval, as shown in Exhibit III-19.
  - Typical negative comments were:
    - . "Sounds too big to use in our company."
    - . "We prefer in-house software."
  - Only two respondents (4%) expressed doubt of the concept's feasibility.
  - Several others had mild doubts as to whether the concept would be flexible enough.
- The reception of the concept did not vary appreciably by company size, as shown in Exhibit III-20.
  - Very small companies seemed somewhat more receptive, in the sense of having fewer negative comments. However, the level of total positive comments was remarkably uniform.

# EXHIBIT III-19

## COMPANY ATTITUDE TOWARD NEW INSCO SOFTWARE CONCEPT

TYPE OF COMMENT	PERCENT OF RESPONDENTS
All positive	46%
All negative	14
Mixed	34
No response	6
<ul style="list-style-type: none"> <li>• Typical positive response: "Sounds good."</li> <li>• Typical negative responses: "Too big for our company," "We prefer in-house software."</li> </ul>	

EXHIBIT III-20

ATTITUDE TOWARD THE NEW SOFTWARE CONCEPT BY COMPANY SIZE  
(percent)

TYPE OF COMMENTS	COMPANY SIZE* (\$ millions)				ALL COMPANIES
	UNDER \$24.9	\$25-74.9	\$75-149.9	\$150-500	
All positive	64%	40%	38%	38%	46%
All negative	15	20	15	8	14
Mixed positive and negative	15	40	46	38	34
No response	6	0	0	15	6
Total	100%	100%	100%	100%	100%

\* SIZED BY GROUP.

- Of great significance is that the INSCO concept was seen as being superior by most respondents to that of current vendor software, as shown in Exhibit III-21.
  - It is very encouraging that as large a percentage of PMS/ISA clients felt that the INSCO concept was better.
  - The INSCO concept did not do quite as well against in-house software, but this is not surprising, since a minority of MIS managers still have very strong views on the correctness of in-house development.
    - However, comparisons with in-house software are less important, since even the supporters of in-house software usually see it giving way to vendor software.
- These expressions of INSCO product superiority should be taken with a small grain of salt: a concept, which is by definition an idealization, can often seem more attractive than current reality. There are, however, two reasons for believing that this is not a seriously disabling objection:
  - The turnkey concept in the earlier study was not at all popular, even though it was not widely used.
  - The INSCO concept was preferred to other vendor software as much by those who were not currently using vendor software as by those who were.
- There were no surprises when it came to hardware preferences: respondents wanted the new software to run on their current hardware (or their planned upgrade, if that was known).
  - This gave IBM a de facto supremacy.

EXHIBIT III-21

COMPANY PREFERENCES FOR NEW INSCO SOFTWARE CONCEPT,  
IN-HOUSE AND VENDOR SOFTWARE

INSCO CONCEPT VERSUS	PERCENT OF RESPONDENTS BELIEVING		
	INSCO BETTER	INSCO WORSE	NO OPINION
In-house software	66%	30%	4%
Vendor software	88	2	10
PMS/ISA clients (19 interviews)	90	5	5



- It is conceivable that the new concept software sold as a unit with IBM-compatible hardware could displace non-IBM hardware. However, this was only touched on in a few interviews, so it can be offered only as a possibility.
- There was far less preference expressed for a particular data base management system (DBMS) to use as Level I, as shown in Exhibit III-22.
  - The large companies tended to have more preferences, reflecting the fact that they were already using a particular DBMS (typically an IBM-supplied product) or had given the question independent analysis.
  - It was somewhat surprising that there was so little preference expressed for a particular DBMS sold by independent software companies (IDMS, Total, System 2000, etc.).
    - In a way, though, this is good, since it would give INSCO more flexibility in selecting a DBMS.
  - In general, respondents had not given this issue much thought. This is not unusual, since a special one-time study of requirements and DBMS suppliers is generally made immediately before a purchase; it is typically not the subject of ongoing analyses (especially at the management levels interviewed here).
- INPUT believes it was significant (and encouraging) that relatively few respondents felt that there should be additional features to the software or that they needed additional information about the concept.
  - This shows that as a concept the product idea is relatively mature and complete.
  - It should be stressed, though, that this is true only on a conceptual level. Some respondents explicitly, and many implicitly, observed that

# EXHIBIT III-22

## DESIRED DATA BASE MANAGEMENT SYSTEM

COMPANY SIZE* (\$ millions)	MANUFACTURER-SPECIFIC (percent of respondents)				NO PREFERENCE
	NON-IBM	IBM**	TOTAL	OTHER	
Under \$24.9	13%	7%	20%	0%	80%
25-74.9	20	0	20	10	70
75-149.9	20	27	47	7	47
150-500	0	60	60	0	40
Total	14%	22%	36%	4%	60%

\* SIZED BY GROUP

\*\* IMS OR DL-1

they, their staff, and company would have to examine any such product thoroughly and consult with prior users to see if the reality lived up to the conceptual promise.

- This quite proper need to thoroughly investigate such a major decision as acquiring new insurance software should be kept in mind when looking at the level of (buying) interest expressed in the INSCO concept, as shown in Exhibit III-23.
  - The level of interest, overall, is encouraging.
    - "Non-core" companies in groups often expressed a low level of interest because the purchase decision was made elsewhere.
  - Large companies (i.e., those over \$150 million) appear, for example, to have a somewhat lower level of interest than others.
    - However, if this category is further split by company type, as shown in Exhibit III-24, much, if not all the difference is accounted for by the preponderance of non-core companies in this category.
- Of those who expressed a view on lease versus purchase, opinion was split about evenly. However, in INPUT's view, not a great deal of emphasis should be placed on this in any marketing plan.
  - Many respondents said, quite reasonably, that they would have to know the cost of the product, pricing methods, lease plans, etc., before they could give a definite answer.
  - Otherwise, answers were based on general company policies and precedents (which were usually modifiable).

# EXHIBIT III-23

## LEVEL OF INTEREST IN INSCO SOFTWARE CONCEPT

COMPANY SIZE* (\$ millions)	LEVEL OF INTEREST (NUMBER OF RESPONDENTS)		
	HIGH	MEDIUM	LOW
Under \$24.9	8	2	4
25-74.9	3	2	5
75-149.9	8	3	2**
150-500	3	2	8**
Total	22	9	19

\* SIZED BY GROUP

\*\* INCLUDES 1 NO RESPONSE

EXHIBIT III-24

LEVEL OF INTEREST IN INSCO SOFTWARE CONCEPT,  
COMPANIES OVER \$150 MILLION

LEVEL OF INTEREST	COMPANIES IN GROUPS		
	"CORE"	"NON-CORE"	NON-GROUP COMPANIES
High	2 (50%)	1 (14%)	-
Medium	-	1 (14%)	1 (50%)
Low	2 (50%)	5 (72%)	1 (50%)

- A more open-ended variant of this question was tried on several early respondents to see if more information could be elicited.
- . However, this only brought into clearer focus a second factor: many respondents were, by this stage in the interview, suffering from "concept fatigue" - they had had to absorb a new concept and play vigorously with it in a very concentrated period of time.
- . Issues like pricing build on the concept and are in a sense subsidiary to it. Until the concept has been fully absorbed, complete answers to dependent issues are not always possible.





#### IV FEASIBILITY ISSUES



#### IV FEASIBILITY ISSUES

- In order for the new software concept to be considered a feasible product to market, it should pass the following tests:
  - The product approach should be acceptable by potential customers.
  - The product should be feasible to develop.
  - The product should have a good chance of dislodging the current market leader and, at the least, being able to survive and generate respectable revenue and profit.
  - A special consideration for INSCO is the relationship of the development and marketing of any such new product to Continental Insurance.
- The first issue was addressed in the previous chapter:
  - The product approach promises good acceptance in the property/casualty industry.
  - The subject will not be taken up again in this chapter explicitly, but is, of course, a key factor in discussing all other issues.
- The remaining issues will be dealt with in this chapter.

## A. PRODUCT DEVELOPMENT

- The difficulties in actually constructing a new property/casualty software product are significant. A list of a few of the desired product's attributes indicates the magnitude of the problem:
  - The software product should include all functions for all lines. (This came across clearly in the survey; equally important, both PMS and ISA are going fairly rapidly in this direction.)
  - It should be marketable as soon as possible. (Many companies have indicated a desire for significant automation improvements in the near future.)
  - It must be a high-quality product; i.e., reliable, understandable, easy to maintain. (This is the root of many of the problems of PMS and ISA products, which were not designed from the ground up with their end purpose in mind; they are adaptations of earlier products.)
- A mammoth, brute force approach to development would be very expensive, and would by no means guarantee success.
- Many potential problems will be side-stepped and reduced in importance by the inherent characteristics of the three-layered product design:
  - Much of the basic system (i.e., non-insurance) software will be contained in Level I of the product, as shown in Exhibit III-18.
  - Much of the application detail work will be performed by the customers, who will be happy to accept it.
- However, a large and irreducible amount of product building will remain. This is desirable, otherwise there would be less scope for pricing on a value basis

and it would be easier for "me-too" vendors to compete. INSCO's basic tasks will be:

- Product integration.
- Construction of Level 2 (the insurance software portion of the product).

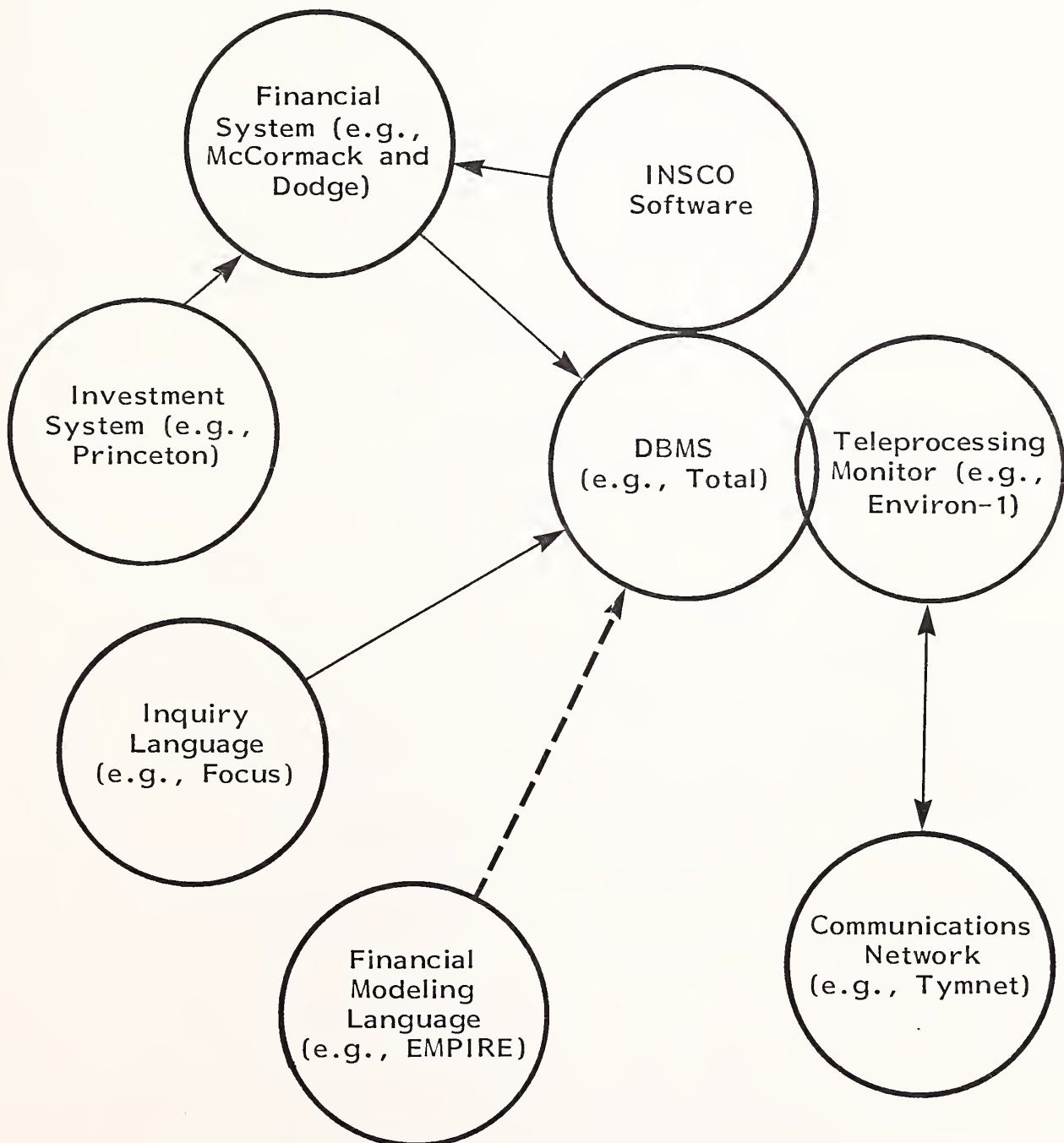
#### I. PRODUCT INTEGRATION VIA "CO-VENTURING"

- One option is for INSCO to become a licensee for a number of software products and put them together itself. Conceivably, INSCO could net a higher return on each side. However, there are counter balancing risks:
  - INSCO would have to be more expert in many more areas; i.e., the PMS/ISA pitfall.
  - The overall level of interest by the other software vendors would be relatively low, which would be reflected in initial and ongoing levels of support (both product support and marketing support).
  - It would be difficult, if not impossible, to work out coherent joint marketing arrangements.
- Because of the risks of going it alone, INPUT believes that INSCO would be better off developing a much closer relationship with Level 1 software suppliers than exists in normal licensee arrangements.
- It would not be a joint venture because there would be no commonly held legal entity or pooling of financial interests.
  - It would be more than joint marketing, though, since the products would not exist at arm's length.

- Analogies are emerging in symbiotic relationships between a number of hardware manufacturers and software companies.
  - . Burroughs has gone so far as to set up a scale of reciprocal commissions.
- The name being given here to this approach is a "co-venture." This recognizes a community of interest that would be:
  - Product related: some degree of product integration would exist.
  - Marketing and sales-related: total selling expenses should be reduced.
  - Support-related: customers should perceive that they are dealing with one supplier, rather than half a dozen.
- Exhibit IV-1 illustrates the functional links between products (product names are for illustration only).
  - The DBMS and associated teleprocessing software are the functional heart of the system (although the INSCO software would be the applications heart and would be the basis upon which a purchase decision was made).
  - Independent DBMS companies are very aggressive, stuffed with cash, and hungry for new (especially applications) products.
    - . They are now trying to buy/license applications products that use their DBMS.
    - . After they realize that they couldn't/shouldn't enter the insurance marketplace on their own, they should be very eager co-venturers.

EXHIBIT IV-1

CO-VENTURE PRODUCTS





- The other non-DBMS co-venturers are not as critical, and could be selected in conjunction with the DBMS co-venturer.
- The selection of the co-venture partners (especially for the DBMS) will be one of the most critical choices facing INSCO.
  - It is marriage without divorce, since any changes would:
    - Halt momentum.
    - Leave INSCO supporting customers with a perhaps recalcitrant or ineffective partner.
    - Add to costs.
    - Be a marketing black eye.
- There are two "qualifying criteria":
  - Staying power; i.e., the company's:
    - Size.
    - Financial resources.
    - Product commitment.
  - Technical features of their product:
    - Efficiency.
    - Flexibility.

- Important as these two criteria are, they are, in the legal phrase, "necessary but not sufficient." There will be a temptation, for example, for INSCO to become quite interested in evaluating technical features and esoteric advantages. However, INSCO will not be dealing with overly sophisticated customers for the most part; most of the "household names" in each category will usually be at least adequate.
- More important in selecting co-venturers are characteristics that are more market-related. These include:
  - Market acceptance; i.e.:
    - Number of customers.
    - Customer satisfaction.
    - Ease of use.
  - Integrated product offerings of software, and perhaps, hardware.
    - One-stop service is preferred.
    - There is an intriguing potential, for example, for a hardware/software bundled sale. The co-venturers could sell IBM-compatible hardware with a full software package at IBM hardware prices alone. INTEL System 2000 is an example of a potential co-venturer with this capability.
  - Product support; i.e.:
    - A demonstrated commitment to quality (not just words).
    - Enhancement plans (but keeping ongoing compatibility between old and new versions of the product).

- Resource commitment.
- Marketing cooperation with INSCO:
  - Enthusiasm for co-venture concept.
  - Application orientation.
  - Resource commitment.
- Software development cooperation.
  - Design.
  - Implementation.
  - Resources.

## 2. INSURANCE SOFTWARE CONSTRUCTION

- The design goals for the insurance software (Level 2) should include the following:
  - Less (or at least no greater) installation work for the customer.
    - Customers will modify package to meet their needs.
  - Much less installation work for INSCO.
  - Built-in quality.
    - Less (expensive) maintenance.
    - Greater customer satisfaction.

- Enhancements and diagnostics on-line.
  - . Decreased INSCO time and money.
  - . Increased customer satisfaction.
- A great deal of attention will have to be paid to the interfaces between the different levels of software.
  - . It is no exaggeration to say that the product will succeed or fail based on the success (or lack of it) in constructing efficient, sturdy, and understandable interfaces.
  - . This must be an INSCO responsibility.
- However, should INSCO do it itself? That is, should this be an in-house software development project?
- In-house development has definite strengths:
  - Closer control and knowledge.
  - Personnel continuity.
  - Lower per person costs.
- On the other hand, software contractors have their own strengths:
  - Wide experience.
  - Usually superior technical expertise.
  - Quick turnaround (i.e., they work hard and put in long hours).

- A software development strategy that could combine the best of both approaches would be to:
  - Choose two or more contractors.
  - They would preferably be of different types, but with overlapping skills.
    - Example: CSC and a smallish, new, hungry firm.
  - This would provide a mix of skills and definite competition between vendors.
  - They might not like INSCO, but they would respect it.
- One reason this approach would be less attractive to software contractors is that they would believe (hopefully correctly) that they would have to work harder for less profit.
  - This could be counterbalanced by the promise of ongoing maintenance and enhancement work on the completed product.
  - Many clients want to push software consultants out of the door as soon as possible.
    - This is often a mistake.
    - It takes a long time (if ever) before in-house staff is as proficient as a good contractor.
    - More importantly, one-shot jobs reduce the incentive of a contractor to do a quality job.
- INSCO would retain core product knowledge on three levels.
  - System overview.

- This would require several in-house gurus to keep contractor respect, if nothing else.
- Detail some staff to work alongside implementors.
- Specifiers and support staff should be all over the system.
- Does it actually work?
  - Is it easy to use?
  - Does it fill insurance needs?

## B. ENTERING A COMPETITIVE MARKET

- The new product concept cannot be looked at in isolation, but must measure itself against current market realities; i.e., PMS (which has over three times as many customers as its nearest competitor, ISA).

### I. PMS: STRENGTHS AND WEAKNESSES

- PMS has been successful by any measure, as shown in Exhibit IV-2. Since entering the market in the mid-1970s, it has had a compounded growth rate of 42%.
  - U.S. computer services revenues grew 19% and 22% in 1978 and 1979.
- PMS has a very impressive customer base, as shown in Exhibit IV-3, which is diversified across all company sizes.
  - Its growth continued in the last year, with all growth in software clients, as shown in Exhibit IV-4.

EXHIBIT IV-2

PMS GROWTH, 1975-1981

REVENUES FROM NON-AFFILIATED COMPANIES							
Revenue (\$ millions)  Percent increase over prior year	1975	1976	1977	1978	1979	1980	1981 (BUDGETED)
	\$1,6 -	\$3.9 144%	\$7.0 79%	\$9.3 33%	\$12.0* 29%	\$16.5 38%	\$22.0* 33%

\*ADD \$7 MILLION FOR REVENUES FROM PMS AFFILIATED COMPANIES



# EXHIBIT IV-3

## NUMBER OF PMS CUSTOMERS IN EARLY 1980\*

COMPANY SIZE (\$ millions)	SOFTWARE	PROCESSING SERVICES			GRAND TOTAL
		PMS	NON-PMS	TOTAL	
\$ 4-9.9	3	1	3	4	7
10-24.9	8	6	5	11	19
25-49.9	14	1	7	8	22
50-99.9	22	3	3	6	28
100+	33	2**	3	5	38
Total	80	13	21	34	114

\* FOR COMPANIES USING BASIC INSURANCE SOFTWARE OR SERVICE, EXCLUDES THOSE USING SPECIALIZED PRODUCTS, E.G., REPORTING SYSTEMS.

\*\* INCLUDES SEIBELS, BRUCE.

# EXHIBIT IV-4

## PMS CUSTOMER GAINS AND LOSSES IN THE LAST YEAR

COMPANY / GROUP SIZE (\$ millions)	NUMBER OF COMPANIES		
	GAINS	LOSSES	NET GAIN
Under \$24.9	3*	2**	1
25-74.9	8**	1*	7
75-149.9	5	0	5
Over 150	4	0	4
Total	20	3	17

\* INCLUDES 1 PROCESSING SERVICES CUSTOMER.

\*\* INCLUDES 2 PROCESSING SERVICES CUSTOMERS.

- Profitability has also been impressive, with an average profitability, since 1976, of 16%, as shown in Exhibit IV-5.
  - This compares to 11% and 10% for software products and processing services companies, respectively, in 1979.
  - Its compounded growth rate has been 16% since 1976.
- However, there has been something of a performance gap:
  - Revenue growth rate (42%) has been much larger than the profit growth rate (16%).
  - Partly, this is due to early profits being the "harvesting" of internal sunk costs.
- However, the erratic record of profitability indicates that there are other, more systemic forces at work. The factors causing this include:
  - Development costs.
  - Personnel costs.
  - Product range.
- PMS development costs as a percent of revenue have been both erratic and, at an average of 30% of revenue since 1976, twice the industry average, as shown in Exhibit IV-6.
- Personnel costs, expressed in terms of revenue per employee, are about twice the industry average, as shown in Exhibit IV-7.

EXHIBIT IV-5

PMS PROFITABILITY, 1975-1981

PROFITABILITY	1975	1976	1977	1978	1979	1980	1981 (BUDGETED)
Operating profit (\$ millions)	\$0.5	\$1.7	\$2.0	\$0.8	\$1.4	\$2.8	\$ 3.5
Percent increase over prior year	-	240%	18%	-60%	75%	100%	25%
Profit as percent of revenue	31%	44%	29%	9%	12%	17%	16%

EXHIBIT IV-6

PMS DEVELOPMENT COSTS

DEVELOPMENT	1975	1976	1977	1978	1979	1980	1981 (BUDGETED)
Development costs (\$ millions)	\$0.3	\$0.6	\$2.1	\$4.0	\$3.9	\$3.9	\$ 7.1
Percent increase over prior year	-	100%	250%	90%	-3%	-	82%
Development costs as a percent of revenue from un- affiliated companies	19%	15%	30%	43%	33%	24%	32%

# EXHIBIT IV-7

## PMS PERSONNEL COSTS

COSTS	1975	1976	1977	1978	1979	1980	1981 (BUDGETED)
Number of employees	150	180	350	487	580	700	840
Percent increase over prior year	-	20%	94%	39%	19%	21%	20%
Employee growth as a percent of revenue growth	-	14%	127%	118%	66%	60%	61%
Revenue per employee (\$ millions)							
- Non-affiliated companies	\$10,700	\$21,700	\$20,000	\$19,100	\$20,700	\$23,600	\$26,200
- Total Revenue	-	-	-	-	\$32,800	\$33,600	\$34,500

- Even if costs associated with work from affiliated companies are included (which, strictly speaking, they should not be), the personnel expense is considerably more than the industry average.
- Some of the discrepancy may be explained by an overstatement of the number of employees devoted to PMS work (a fairly common practice among smaller companies, but unusual in a company of this size).
- In INPUT's opinion, many of these cost pressures are a result of PMS's efforts to have a totally self-contained (i.e., constructed and supported by themselves) range of software products, as shown in Exhibit IV-8.
- It is very difficult to support complex systems software, insurance software, and non-insurance applications software.
  - There are no economies of scale or specialization advantages in having such a wide range.
  - Software maintenance has been the bane of both in-house and vendor-developed software to date, with well over 50% of current effort expended on "maintenance" that usually would not be necessary if software was analyzed, designed, and built correctly initially, as shown in Exhibit IV-9.
  - These maintenance problems are reflected even in PMS's own marketing literature, which is replete with announcements of software "improvements" such as:
    - "Provide greater support."
    - "Will be redesigned."
    - "Improvements were made."



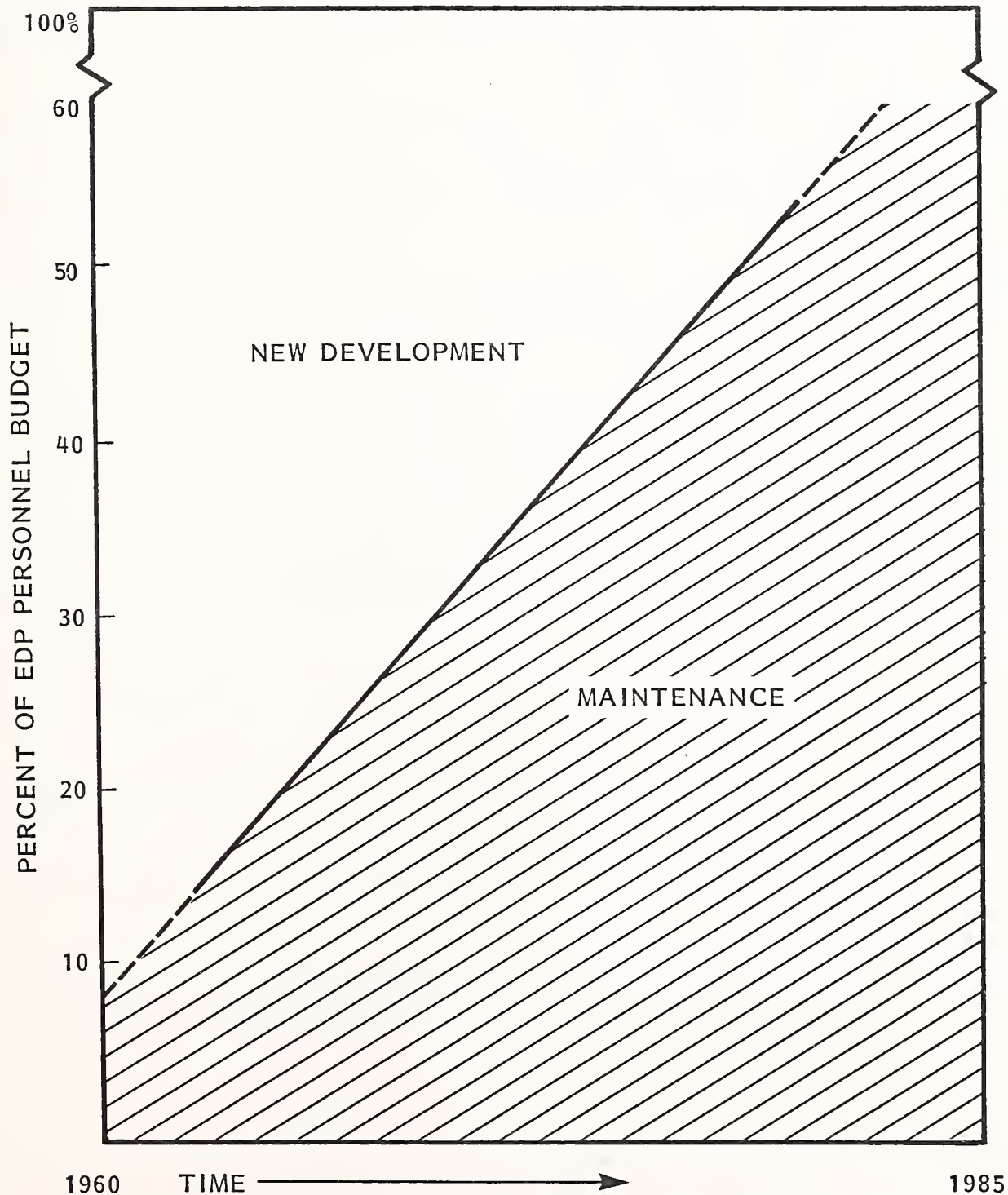
## EXHIBIT IV-8

### PMS PRODUCT RANGE

- Complete Insurance Software (PMS) Targetted
  - All Functions
  - All Personal Lines (now exist)
  - Commercial Lines
    - Workers Comp. And Commercial Auto Rating (now exist)
    - General Liability, Commercial Fire, Inland Marine, SMP, Glass, Crime (soon to be offered)
    - Reinsurance (1982)
  - Account Reconciliation
  - Reporting System
    - Management
    - Bureau and Regulatory
    - Agency Management
  - "Mini-PMS" For Small Companies
- Non-Insurance Applications
  - Financial System
    - General Ledger
    - AIP, AIR
  - Securities Management
- General System Products
  - Data Dictionary (GTAM)
  - Report Generator (EXTRACTO)
  - Electronic Mail (Future)
- Interface to Agency Management System (Future)
  - Distributed Data Processing (Future)

EXHIBIT IV-9

PERCENT OF EDP PERSONNEL BUDGET DEVOTED  
TO SOFTWARE MAINTENANCE AND ENHANCEMENT



SOURCE: INPUT'S 1980 MULTICLIENT STUDY, IMPROVING THE PRODUCTIVITY OF  
SYSTEMS AND SOFTWARE IMPLEMENTATION

- . "Facilitate compatibility."
- . "Continuously enhanced."
- . "Has been completely redesigned."

## 2. THE INSCO OPPORTUNITY

- In INPUT's opinion, PMS is caught in a cleft stick as far as its product array is concerned.
  - It has a large range of operational products, which it cannot realistically drop.
  - Since its basic software is homegrown, it cannot share development/maintenance costs with anyone else.
  - Additional software, even from the outside, must be tailored to fit the already imposing mass that has accumulated.
    - . This is not the route of low costs, or, usually, customer satisfaction.
- INPUT believes that this product situation was one of the chief motives in selling its partially developed agency system to Commercial Union (besides, of course, the attractive price).
  - From a product planning standpoint, it would have made more sense to keep and build an insurance product rather than their present miscellany of non-insurance products.
  - But, PMS could not do both, so it had to get rid of a promising (certainly in the eyes of Commercial Union) product, so that it could have the cash to maintain its non-insurance products.

- Besides the intrinsic appeal of the new concept software vis-a-vis PMS, PMS would almost certainly provide a de facto price umbrella. PMS has an unavoidable high front load cost, because of its software's intrinsic characteristics and needs:
  - Software tailoring is usually required for each customer.
  - There is difficulty in program logic changes (i.e., hard coding changes).
  - Customer education in package requirements is a long, drawn-out process.
  - PMS must supply conversion assistance; e.g.:
    - . File coding.
    - . Procedures.
  - The remaining incompatibilities and lack of integration in its product line.
- INSCO would consequently have the enviable choice of undercutting PMS on costs (slightly), having better margins, and being able to provide a better product.

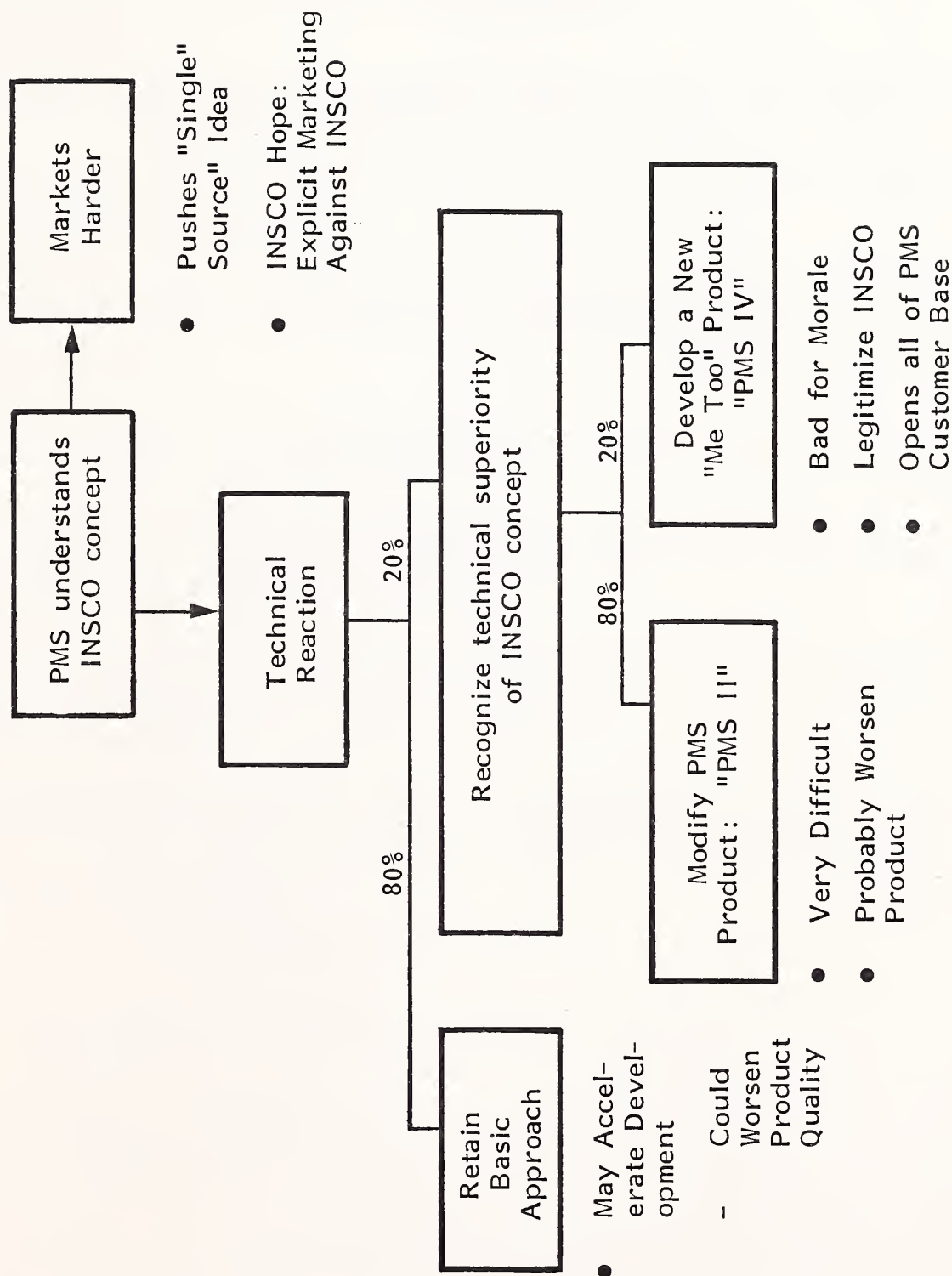
### 3. SECRECY VERSUS OPENNESS

- Soon after development begins, at least 100 people will know some aspect of the INSCO concept.
  - Potential co-venturers.
  - Potential software contractors.

- Advisory board members.
- A discarded co-venturer could find another insurance system partner.
  - This is doubtful.
  - If so, it would legitimize the concept publicly.
- INPUT believes that the more talk inside the insurance community, the better.
  - This would be advance marketing.
  - It is hoped it would have a "chilling" effect on PMS sales.
- The range of PMS reactions is illustrated in Exhibit IV-10.
- The best reaction for PMS (and the most likely) is to do nothing and act like the leader.
  - The internal pressure to believe in the PMS approach will be strong.
  - This is the second best response from INSCO's standpoint.
    - The best response would be for PMS to "steal" INSCO's ideas. This would provide instant legitimacy.
- Therefore, the more knowledge of INSCO's approach and plans, the better.
- There are some important tactical exceptions, where secrecy should be maintained:
  - INSCO's master planning schedule.
  - Field test sites (which are difficult to withhold).

# EXHIBIT IV-10

## STRATEGIC SURPRISE VIS-A-VIS PMS



- Marketing data base.
- . Top secret.

### C. RELATIONSHIP TO CONTINENTAL INSURANCE

- In the course of this study, INPUT became aware of previous problems between INSCO and Continental Insurance in products and marketing. Examples include:
  - Joint rate filing preparation in mid-1970s.
    - . INSCO clients were able to file first and agents serving both INSCO client customers and Continental made negative comments.
    - . Separate, duplicative efforts were set up as a result.
  - INSCO was discouraged from selling to Continental competitors during a critical period in the mid-1970s.
    - . INSCO momentum was lost.
  - INSCO has never been able to offer the PCP system.
- INSCO and Continental should act together to ensure that similar problems do not arise in the future. There are two basic options:
  - Develop the new software jointly.
  - INSCO develops it separately.



- Lower the cost to INSCO.
  - Take full advantage of Continental's insurance expertise.
  - Produce improved software (probably in selected areas) for Continental.
  - Neutralize marketing disadvantage for INSCO of not having parent company using the product.
- Total separation, with INSCO proceeding independently, is less preferable although viable.
    - There would be higher costs for INSCO.
    - A problem of success: Continental's perception that INSCO was supplying better tools to competition.
    - A marketing drag: clients expect parent to endorse a subsidiary's software by using it.
- These issues should be addressed early on, so that the course of product development is clear, and plans will not have to be changed, resulting in loss of time, money, and momentum.



## V RECOMMENDATIONS



## V RECOMMENDATIONS

- INPUT has made a number of suggestions and judgments throughout the report. In this chapter, INPUT makes recommendations in the following areas:
  - Product opportunity.
  - Phased approach.
  - Interim marketing steps.
  - Focused marketing.

### A. THE PRODUCT OPPORTUNITY

- In INPUT's view, INSCO has the following alternatives:
  - Do nothing different, resulting in:
    - . Decreasing clients/revenues.
    - . Increasing losses.

- Increase sales of the present product. This would be very difficult; if achieved, it would probably be a result of:
  - . Lower prices.
  - . Increased service levels (costs).
  - . Consequently, increasing loss.
- Pull out of the market. This would require arranging for clients to be served elsewhere (to protect Continental's name).
  - . Probably require an INSCO-financed "bridging" period.
- Purchase/license already existing software. However, current offerings have the same defects as PMS:
  - . Piecemeal.
  - . Older technology.
  - . Fragmentary customer bases.
  - . Main objection: no flexibility; i.e., the lack of proposed first and third levels.
- Introduce new concept software product.
  - . This will take time (two to three years) before introduction and require additional investment.
  - . Will require support of existing products in interim.
  - . There is some risk.

- However, INPUT firmly believes there is significant product opportunity.
- There is likely to be intrinsic product superiority in both cost and performance.
- The concept is attractive to customers.
- PMS has weaknesses that can be exploited.
- The marketing synergy with co-venturers is a bonus.

## **B. PHASED APPROACH**

- INSCO should proceed with development in phases, so that the product development can be controlled (and terminated) at the least cost. Suggested phases are shown in Exhibit V-1.

### **I. BUSINESS PLAN DEVELOPMENT: PHASE I**

- Before a formal business plan can be developed there is still a need for more information about:
  - Development costs.
  - Unit revenues.
- Development costs depend on:
  - The extent of the Continental Insurance role.
  - Extent of assistance from co-venturer(s).



## EXHIBIT V-1

### PHASED APPROACH

PHASES	ELAPSED TIME (MONTHS) *
I Business Plan Development	6
II Product Specifications	6
III Product And Organization Building	6
IV Field Testing	12
V Marketing	Begin in second part of Phase IV

\*ORDER OF MAGNITUDE, FOR DISCUSSION PURPOSES ONLY.

- The product design and implementation approaches selected.
- The extent of out-of-house software development.
- Unit revenues will depend on costs and the pricing strategy selected.
- INSCO should examine data from the following areas:
  - Continental of Canada.
  - Tokio Marine and Fire.
- Schedule remaining phases.
- Set up product development organization.

## 2. PRODUCT SPECIFICATIONS: PHASE II

- The second phase will develop the general system design.
  - This is critical to product solidity.
  - The key links are between "levels" in package.
    - Interfaces are always the weakest area in any software product.
  - Product specifications will drive module design.
    - Specifiers and designers should not be kept in separate "boxes."
    - Avoid traditional system design life cycle structure, titles, etc., as much as possible. The venture should aim to be small, compact, fast-moving, and flexible.

- An overview marketing plan should be developed in this phase. It should contain:
  - An assessment of competitive strengths and weaknesses.
  - A customer data base.
  - An assessment of innovative sales techniques, for example:
    - . Direct mail.
    - . Seminars.
    - . Publications.
  - A service and support philosophy.
  - A description of distribution channels, including:
    - . Relationships with co-venturers.
- The plan for the build up in sales capability should include strategies for:
  - Personnel.
  - Training.
  - Marketing communications.

### 3. PRODUCT AND ORGANIZATION BUILDING: PHASE III

- In the third phase, visible development would actually begin. Adherence to schedule and budget depends on quality of work in Phase II. The major components will be to:

- Construct software.
- Train support staff.
- Plan the detailed marketing plan.
- Train the sales force.
- Software construction includes:
  - Programming.
    - Technical documentation should flow from Phase II work.
  - Rigorous quality control, acceptance testing.
  - User documentation.
  - "Dummy" field testing.
- Support staff training will:
  - Start with developing a training program.
    - Recruitment/training will be the key barrier to rapid expansion.
  - Help create user documentation.
- The detailed marketing plan will:
  - Aim at exploiting product strengths that become apparent in the development and testing process.
  - Develop a sales strategy and plan.

- Provide marketing materials.
- Provide training materials.
- Sales force training will include:
  - Planning for expansion.
  - Training seminars.
  - Working out the mechanics of joint sales with co-venturers.

#### 4. FIELD TESTING: PHASE IV

- Several different sites should be selected for field testing, including:
  - Continental(?).
  - Present INSCO client(s).
  - Advisory board member(s).
  - Other companies discovered in ongoing marketing.
- Different test environments should be selected both to test the product in different settings and to maximize the number of success stories. Criteria will include:
  - Company size.
  - Type of business.
  - Prior system sophistication.

- Field testing should be built up quickly:
  - To gain experience.
  - To take advantage of the law of large numbers; i.e., if something goes wrong at one or two test sites, INSCO will still not lack for marketing success stories, nor will morale be hurt.
  - For the entire staff to get used to high activity.

### C. INTERIM MARKETING STEPS

- There is a need for interim steps for motivation purposes.
  - Internal reasons are to:
    - Keep morale up.
    - Retain staff.
    - Provide education/preparation for new product.
  - External reasons are to:
    - Prove INSCO is still alive and still a factor.
    - Show that it is an innovative force again and set stage for new concept software.
- The best way of doing this is for INSCO to market one or more new, attractive products.

- These could be internal Continental products, such as PCP or other Workers' Compensation systems.
- Possibly, it could be an externally acquired product.
- It is not essential that any such product achieve large sales.
  - The essential element is that INSCO's name be kept before the marketplace to prove that it is still a factor.
  - The product should have features that no competitive product has in order to start to develop an image of innovation.
- It is important that not too many resources be devoted to what will be an interim product.
  - This makes the purchase of outside software somewhat less likely.

#### D. FOCUSED MARKETING

- INSCO should begin to establish a marketing data base as soon as possible so that it can direct the right kind of marketing efforts to the right people.
- The marketing data base should include such things as:
  - Decision maker(s) within each company. As shown in Exhibit V-2, these can vary greatly.
  - Equally important are the relationships between decision makers within a group. Exhibit V-3 shows a schematic for the relationships that should be documented for each group.



# EXHIBIT V-2

## DIFFERENT PATTERNS OF RESPONSIBILITY FOR RECOMMENDING AND DECIDING DATA PROCESSING PURCHASES

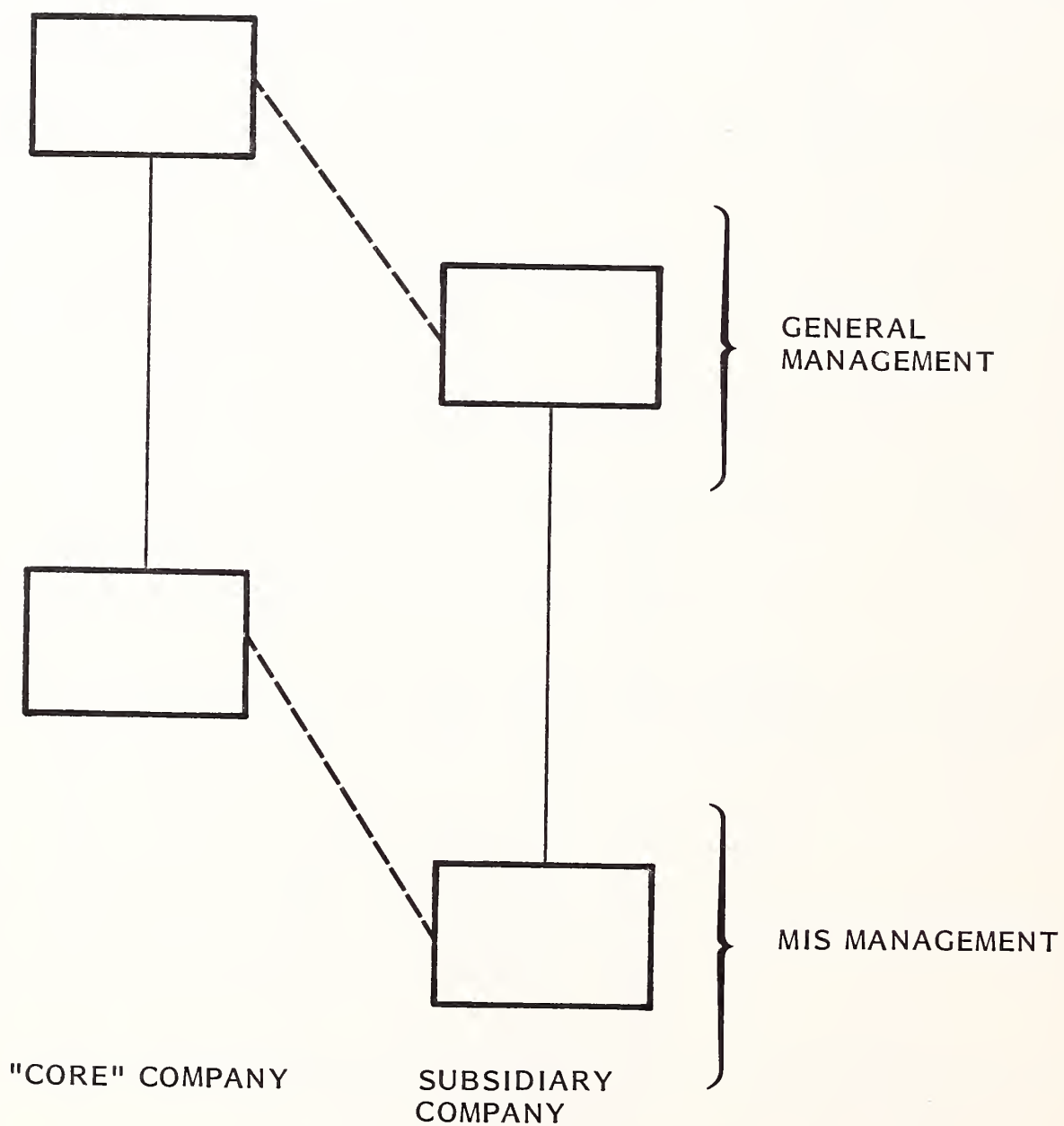
COMPANY TYPE	NUMBER OF COMPANIES INVOLVED IN PURCHASING PROCESS				
	RECOMMENDS		DECIDES		
	DP MANAGER	"VICE PRES." OVER DP MANAGER	PRESIDENT	COMMITTEE	OTHER
<u>Mutuals</u>					
Under \$25 million	6	0	3	1	2
Over \$25 million	4	3	5	2	0
Subtotal	10	3	8	3	2
<u>Stock</u>					
Under \$25 million*	4	3	6	2	0
Over \$25 million	5	4	3	3	3
Subtotal	9	7	9	5	3
Under \$25 million	10	3	9	3	2
Over \$25 million	9	7	8	5	3
Total	19	10	17	8	5

\*IN ONE COMPANY, PRESIDENT HEADS DATA PROCESSING AND ALSO DECIDES.

SOURCE: FIRST INSCO STUDY

EXHIBIT V-3

GROUP RELATIONSHIPS



- A.M. Best data.
  - Hardware installed/planned.
  - Software installed/planned, especially insurance software.
  - History of INSCO sales efforts and prospect responses.
- These data, constantly updated and refined, can be used to focus INSCO's sales efforts.
- The goal will be to have a more effective sales record than the software industry generally, but at lower marketing costs.



## APPENDIX A: COMPANIES INTERVIEWED



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- Admiral Insurance Company.
- Allendale Insurance Company.
- Allied Fidelity Insurance Company.
- American Ambassador Insurance Company.
- American Bankers Insurance Company.
- American Continental Insurance Company.
- American Druggists Insurance Company.\*
- American Hardware Mutual Insurance Company.
- American Southern Insurance Company.\*
- Bay State Insurance Company.
- Beacon Insurance Company.
- Beacon National Insurance Company.



- Bellefonte Insurance Company.\*
- Benico Insurance Company.
- Century - National Insurance Company.
- Chubb Insurance Company.\*
- Concord Insurance Company.
- Cotton States Insurance Company.
- Designers Professional Insurance Company.
- Eagle Star Insurance Company.\*
- Equitable General Insurance Company.\*
- Farmers Alliance Insurance Company.
- Federated American Insurance Company.
- General Insurance Company.
- GMAC Insurance Company.
- Georgia Casualty and Surety Insurance Company.\*
- Globe Insurance Company.
- Gulf Insurance Company.
- Hamilton Insurance Company.

- Hamilton Mutual Insurance Company.\*
- Highlands Underwriters.
- Ideal Mutual Insurance Company.\*
- Investors Insurance of America.
- Iowa National Mutual Insurance Company.
- Medical Protective Insurance Company.
- Midland Insurance Company.\*
- Midwest Indemnity Insurance Company.\*
- Mutual Fire and Marine Insurance Company.
- National General Insurance Company.
- National Grange Insurance Company.
- Pennsylvania National Mutual Insurance Company.
- Puritan Insurance Company.
- Rockwood Insurance Company.
- Southern Insurance Company.\*
- Stonewall Insurance Company.
- Tennessee Farmers Mutual Insurance Company.

- Tri-State Insurance Company of Minnesota.
- United Fire and Casualty Insurance Company.
- Utica National Insurance Company.
- Western World Insurance Company.

\* = On-site interview.

## APPENDIX B: QUESTIONNAIRE



## PROPERTY/CASUALTY INSURANCE SOFTWARE QUESTIONNAIRE

1. Please describe the lines of insurance and functions in your company that are now automated. For each function, what is the source\*\* of the automation and your level of satisfaction?

FUNCTION	TYPE OF AUTOMATION*	SOURCE**	SATIS-FACTION***	COMMENTS

\* Batch, remote job entry (RJE), on-line interactive.

\*\* In-house development (at interviewed site), affiliated company, remote processing service vendor, vendor software.

\*\*\* 5 = High, 3 = Medium, 1 = Low

INPUT

- 2a. In broad terms, what are you looking for data processing to accomplish for your company that it isn't doing now?

When and how do you see this being accomplished?

- 2b. Do you plan further automation in the next two years (new lines or functions and/or enhancements to currently automated functions)? What will be the source\*\* of the software?

FUNCTION	TYPE OF AUTOMATION*	SOURCE**	REASON

\* Batch, (RJE), on-line interactive.

\*\* In-house development, affiliated firm, RCS vendor, vendor software.



3. What lines or functions will not be automated in the next two years? Why not?

FUNCTION	REASON

4. How many computers and terminals do you have now and how many do you expect to have by the end of 1983?

What is the reason for the change?

What kind of system software are you using now and are changes planned by the end of 1983? Why?

	1981	1983	REASON FOR CHANGE
Computer Systems:			
Manufacturer			
Model #			
No. of Units			
Terminals			
Manufacturer			
Model #			
No. of Units			
No. of Locations			
System Software			
Operating Systems			
Telecommunications Monitors			
Data Base Mgt. Sys.			

5a. How many programmers and analysts do you currently employ?

5b. How difficult have you found it to recruit and retain programmers and analysts?  
(5 = Not difficult, 3 = Moderately difficult, 1 = Very difficult)

Why?

5c. What is your company now spending on data processing, broken out by personnel, hardware, and outside processing and software? What sort of changes do you see by 1983? (ignoring inflation) Why?

	1981	1983	REASON FOR CHANGE
In-House Personnel			
In-House Hardware			
Outside Processing			
Vendor Software			
Other			
TOTAL			

6. What trends do you see occurring in insurance data processing over the next five years?

- How do you see these trends affecting your company?

7a. Approximately how much of your software has your company developed in-house? \_\_\_\_\_%

- Why?
- What language (or languages) are used?
- What do you like best about in-house developed software?
- What do you like least?

- 7b. How would you rate in-house developed software in the following areas:  
(1 = Low, 3 = Medium, 5 = High) and why?

	RATING	REASON
Speed of Implementation		
Ease of Implementation		
Meeting User Requirements		
Reliability		
Effort Needed to Convert Prior Systems		
Ease of Maintenance		
Ability to Make Changes Easily		
Ability to Make Changes Quickly		
Amount of Support Needed		
Cost		

7c. How difficult have you found it to develop and maintain in-house software that is technically advanced? (5 = Very difficult, 3 = Moderately difficult, 1 = Not difficult)

- Specifically what has your experience been with:

\_\_\_\_\_ On-line, interactive systems.  
Why?

\_\_\_\_\_ Applications tied into a data base management system.  
Why?

8a. Do you now use insurance application software obtained from a vendor or another third party source?

( ) YES      ( ) NO

- If yes:

- Who?
- Approximately what portion of your software comes from this source?

- If no:

- Have you considered using outside software?
- Why?

- How well are you acquainted with insurance software offered by particular vendors? Where did you get the knowledge?

PACKAGE NAME	LEVEL OF KNOWLEDGE	SOURCE OF KNOWLEDGE

- What do you like best about vendor software?
- What do you like least?



- 8b. How would you rate vendor software generally in the following areas (1 = Low, 3 = Medium, 5 = High) and why?

	RATING	REASON
Speed of Implementation		
Ease of Implementation		
Meeting User Requirements		
Reliability		
Effort Needed to Convert Prior Systems		
Ease of Maintenance		
Ability to Make Changes Easily		
Ability to Make Changes Quickly		
Amount of Support Needed		
Cost		

8c. Will you be more inclined to use vendor-supplied software instead of in-house developed software in the future?

- Why?

9a. I would like to describe a new type of insurance software package which may be introduced in the near future. This software would exist on three inter-related levels:

- The first level would provide the foundation for the others. It would consist of:
  - A commercially offered data base management system with an associated:
    - Data dictionary.
    - Telecommunications monitor.
    - Report writer/inquiry language.
- The second level would be a generalized software framework for property/-casualty insurance applications that could be modified and extended by each insurance company. This second level would consist of such things as:
  - Recommended data base organization alternatives that have been proved in use.
  - Data element definitions.

- Transaction processor programs for handling different types of insurance transactions (e.g., processing rating and claim information for different lines interfaces to agent systems, etc.).
  - Standard insurance reports, with user controllable parameters.
  - The third level would consist of user-supplied logic and user-written programs prepared by each insurance company.
    - Some companies would make relatively few modifications. For example, if companies were able to make their administrative procedures or coding structure conform to the common framework.
    - Many companies, though, would wish to make changes to the software in order to minimize administrative disruptions; to allow for specialized or innovative insurance programs, for example.
    - In any event, the software framework will be designed to be very adaptable to modification by each insurance company.
- 9b. From your standpoint what are the good and bad points you see about this approach? (ENCOURAGE DISCUSSION)

GOOD

BAD

9c. In your opinion, in what ways would this new kind of software be better or worse, compared to in-house developed software and conventional vendor packages?

- Compared to in-house developed software:

- Compared to other vendor packages:

9d. Before you would consider using this new kind of software described earlier:

- What other features or capabilities would it have to have?
- What kind of additional information about this product would you require to evaluate it?

9e. If the other features and additional information you just mentioned were supplied to you, what would your level of interest be in obtaining this software (high, medium, low)?

(NOTE: There will be no sales calls as a result of this interview or question.)

Why?

- What lines would you have the most interest in automating with this software (e.g., homeowners, special multi-peril, workers' compensation, etc.)
  - The least interest?
  - Why?
- What functions would you have the most interest in automating with this software? (e.g., rate calculations, forms generation, storing data for review, etc.)?
  - The least interest?
  - Why?

9f. If you were to use this kind of software:

- What kind of hardware would you want it to be usable on?
  - LIST.
  - \_\_\_\_\_
  - \_\_\_\_\_

- How important would it be to you to have this software implemented on the following IBM systems (if not named above)?
    - . System 3.
    - . System 34.
    - . System 38.
    - . 360 series.
    - . 4300 series.
    - . 370 series.
    - . 3000 series.
  - What IBM operating system (or systems) would you want it to be implementable under?
  - Do you have positive or negative preferences for the particular data base management system used?
    - Positive preferences:
    - Negative preferences:
- 9g. Would you prefer to purchase or lease this software?
- Why?
- What would be a reasonable price range for this kind of product, in your opinion?
  - What factors caused you to name this amount?







